Supreme Court, U.S.
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No. _____

In The

Supreme Court of the United States

COMMONWEALTH OF MASSACHUSETTS
AND THE STATE OF NEW JERSEY,

Petitioners,

v.

AMERICAN TRUCKING ASSOCIATIONS, et al.,

Respondents.

On Petition For A Writ Of Certiorari To The United States Court Of Appeals, District Of Columbia Circuit

PETITION FOR A WRIT OF CERTIORARI

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QUESTIONS PRESENTED

Sections 108 and 109 of the Clean Air Act, 42 U.S.C. §§7408-7409, direct the Administrator of the Environmental Protection Agency ("EPA") to set and periodically revise national ambient air quality standards ("NAAQS") for a limited subset of air pollutants, based on the latest scientific evidence concerning the nature and magnitude of the effects of these pollutants on public health and welfare. Sections 181 and 182 of the Act, 42 U.S.C. §§ 7511-7511f, impose specific deadlines and requirements on those portions of the nation not in compliance with the ozone NAAQS in effect when Congress added these provisions to the Act. The questions presented are as follows:

1. Whether the EPA Administrator's 1997 promulgation of revised NAAQS for particulate matter and ozone rested on an application of Clean Air Act sections 108 and 109 that amounts to an unconstitutional delegation of legislative authority to the executive in violation of Art. I, § 1 of the Constitution.

2. Whether sections 181 and 182 of the Clean Air Act permit the Administrator to promulgate a revised ozone NAAQS but forbid her to enforce the revised standard.

PARTIES TO THE PROCEEDINGS

Petitioners, intervenors in the appeals court, are the Commonwealth of Massachusetts and the State of New Jersey.

Respondents are the Environmental Protection Agency (which was a respondent below); National Stone Association, Kennecott Holdings Corporation, Kennecott Energy and Coal Company, Kennecott Services Company, David Matusow, Citizens for Balanced Transportation, West Virginia Chamber of Commerce, Midwest Ozone Group, Nevada Mining Association, Newmont Gold Company, Meridian Gold Company, Idaho Mining Association, American Iron & Steel Association, National Small Business United, American Farm Bureau, Duquesne Light Company, American Trucking Associations, American Public Power Association, Appalachian Power Co., American Petroleum Institute, National Association of Manufacturers, Western Fuels Association, Inc., National Association of Home Builders, American Iron & Steel Institute, Alliance of Automobile Manufacturers Association, National Mining Association, American Forest & Paper Association, Inc., National Petroleum Refiners Association, National Petroleum Institute, Chemical Manufacturers Association, Non-ferrous Founders' Society, State of West Virginia, Ohio Mining & Reclamation Association, State of Ohio, State of Michigan, United Mine Workers of America, AFL-CIO, Small Business Survival Committee, Equipment Manufacturers Institute, National Paint and Coatings Association, National Small Business United, National Automobile Dealers Association, American Farm Bureau Federation (all petitioners below); and the American Lung Association, American Public Power Association, Texas Gas Transmission Corporation, Atlantic City Electric Company, and American Road & Transportation Builders Association (intervenors below).

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PETITION FOR A WRIT OF CERTIORARI

Petitioners respectfully petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the District of Columbia Circuit in this case.

OPINIONS BELOW

The opinion of the court of appeals (App.1-63) is reported at 175 F.3d 1027. The following orders of the court of appeals are reported at 195 F.3d 4: the order granting in part and denying in part petitioners' petition for rehearing (App. 64-82); the order denying, by a vote of 4-5 of the judges participating, EPA's petition for rehearing *en banc* (App. 83-91); and the order denying petitioners' petition for rehearing *en banc* (App. 92-93).

JURISDICTION

The judgment of the court of appeals was entered on May 14, 1999. On October 29, 1999, petitioners' timely petition for rehearing was granted in part and denied in part; petitioners' timely petition for rehearing *en banc* was denied; and the court denied, by a 4-5 vote of the judges participating in the decision, EPA's timely petition for rehearing *en banc*. This Court's jurisdiction is invoked under 28 U.S.C. § 1254(1).

CONSTITUTIONAL, STATUTORY, AND REGULATORY PROVISIONS INVOLVED

Article I, § 1, of the Constitution provides in pertinent part that "All legislative Powers herein granted shall be vested in a Congress of the United States . . ."

The statutory and regulatory provisions relevant to this case are set forth *infra*, App. 94-113.

STATEMENT

In 1997, EPA revised its existing air quality standards for particulate matter ("PM") and ozone. See National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652, 38,655 (1997) ("PM Final Rule"); National Ambient Air Quality Standards for Ozone, 62 Fed. Reg. 38,856, 38,860 (1997) ("Ozone Final Rule"). It acted on the basis of exhaustive scientific inquiry into the nature and magnitude of the effects of these pollutants on human health and welfare. EPA estimated that its revised standards together could save as many as 15,000 additional lives per year as compared to the previous standard, and also annually prevent hundreds of thousands of additional cases of aggravated asthma and significantly decreased lung function.[1]

The D.C. Circuit held that the Clean Air Act, as applied in these rulemakings, delegates authority to the executive in violation of the Constitution. The court also held that section 181 of the Act, 42 U.S.C. § 7511, prevents EPA from enforcing the revised ozone standard.

Judge Tatel dissented from the panel's decision on the delegation question. (App. 55.) Five judges – a majority of those participating – voted to rehear the case *en banc*. (App. 84.) But because D.C. Circuit rules require that a majority of the court's active sitting judges vote in favor of rehearing a case

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[1]Hearing on Use of Fire As a Management Tool and Its Risks and Benefits for Forest Health and Air Quality Before the House Comm. On Resources, 105th Con. 1st Sess., Sept. 30, 1997, Serial No. 105-45, p. 16 (statement of Carol Browner).

en banc, and because two active judges did not participate in the decision, rehearing *en banc* was denied.[2]

A. Statutory and Regulatory Background

1. Establishing and Revising the NAAQS

The Clean Air Act requires the Administrator ("Administrator") of EPA to establish and periodically revise national ambient air quality standards ("NAAQS") for a limited subset of air pollutants. 42 U.S.C. §§ 7408-7409. These standards identify the maximum permitted level of the regulated pollutants in the outside air.[3]

NAAQS may be set only for air pollutants that "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare" and "the presence of which in the ambient air results from numerous or diverse mobile or stationary sources." 42 U.S.C. § 7408(a)(1)(A)-(B). Thus NAAQS may be set only for widespread pollutants that endanger public health or welfare. Today, NAAQS exist for six

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[2]Federal Rules of Appellate Procedure and Corresponding Circuit Rules of the District of Columbia Circuit, Rule 35(a) (circuit rules as amended through 1-3-00).

[3]Primary NAAQS are designed to protect the public health. 42 U.S.C. § 7409(b)(1). Secondary standards are designed to protect public welfare, *id.* § 7409(b)(2), broadly defined to include, for example, effects on soils, crops, and wildlife, *id.* § 7602(h). The primary and secondary standards at issue here are identical. PM Final Rule, 62 Fed. Reg. at 38,683; Ozone Final Rule, 62 Fed. Reg. at 38,877.

air pollutants: PM, sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, and lead. See 40 C.F.R. §§ 50.4 - 50.12.

The Clean Air Act directs the Administrator to review the NAAQS every five years. 42 U.S.C. § 7409(d)(1). Based on this review, the Administrator may promulgate a new NAAQS, or revise an existing one. *Id.* § 7409(a)(1). No new pollutant has been regulated under the NAAQS program since 1978, when the NAAQS for lead was issued.[4]

The Clean Air Act requires extensive scientific inquiry into the nature and severity of harm caused by an air pollutant before a NAAQS for that pollutant can be established or revised. The Act requires, first, that air quality "criteria" be developed for pollutants in the NAAQS program. These criteria – which are described in a "criteria document" prepared by the agency – must reflect "the latest scientific knowledge" indicating the "kind and extent of all identifiable effects on public health or welfare." 42 U.S.C. § 7408(a)(2).

The Act requires, in addition, that a scientific advisory committee – known as the Clean Air Scientific Advisory Committee, or "CASAC" – review the air quality criteria and NAAQS. The committee must recommend to the Administrator any new or revised NAAQS that may be appropriate in light of the statutory requirements, and must also describe the areas in which "additional knowledge" is required to evaluate any NAAQS. 42 U.S.C. § 7409(d)(2)(B)-(C).

The NAAQS themselves must be "based on" the air quality criteria. 42 U.S.C. § 7409(b)(1). They must be set at a level which, "allowing an adequate margin of safety, are requisite to

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[4]43 Fed. Reg. 46,246 (1978).

protect the public health." *Id.* § 7409(b)(1). The Administrator may significantly depart from the recommendations of CASAC only if she explains why she has done so. *Id.* § 7607(d)(3). EPA has consistently interpreted the Clean Air Act to require the protection of sensitive subpopulations such as children, the elderly, and people with respiratory problems. *Lead Industries Assoc. v. EPA*, 647 F.2d 1130, 1153 (D.C. Cir. 1980).

2. Implementing the NAAQS

Once the NAAQS are established or revised, attention shifts to achieving them. Although the Clean Air Act gives the states the primary responsibility to implement the programs to achieve the NAAQS, 42 U.S.C. § 7410, the statute also significantly constrains the timing and content of the process of implementation.

Designation: Attainment Status. Implementation begins with the designation of areas according to whether their air quality complies with the NAAQS. The three possible designations are "attainment" (area meets the NAAQS), "nonattainment" (area does not meet them), or "unclassifiable" (area's attainment status cannot be determined based on available information). 42 U.S.C. § 7407(d)(1)(A)(i)-(iii).

Section 107(d) provides that areas may be designated at three different points in time. First, areas may be designated when a new NAAQS is established, or an existing one revised. 42 U.S.C. § 7407(d)(1). Second, areas were designated following the 1990 Amendments to the Clean Air Act. *Id.* § 7407(d)(4). Third, areas may be "redesignated" based on new information. *Id.* § 7407(d)(3). For example, an attainment area may be redesignated as nonattainment if its air quality ceases to meet the NAAQS.

State Implementation Plans. The next step toward achieving the NAAQS is for the states to submit state implementation plans, or "SIPs." 42 U.S.C. § 7410. These plans specify the measures states will take to attain or maintain the NAAQS within their borders. *Id.* § 7410(a)(1). A state may consider cost and technological feasibility in developing its SIP; indeed, "[s]o long as the national standards are met, the State may select whatever mix of control devices it desires . . ." *Union Electric Company v. EPA*, 427 U.S. 246, 266 (1976).

Nonattainment. Special rules apply with respect to areas designated as nonattainment. Part D of Subtitle I sets forth requirements for SIPs in states containing nonattainment areas. 42 U.S.C. §§ 7501-7515. Part D establishes both *what* is required in the SIPs of states that contain nonattainment areas and *when* it is required. Part D contains five subparts. Subpart 1 sets forth rules for nonattainment areas in general. 42 U.S.C. § 7501-7509a. Subparts 2-5, added to the Act in 1990, impose new requirements on areas that were then in nonattainment for any of the pollutants covered by the NAAQS. *Id.* §§ 7511-7514a.

Subpart 1. Under Subpart 1, after designating an area as nonattainment under section 107(d), the Administrator may "classify" the area, in accordance with the severity of its air quality problem, for the purpose of setting a deadline for attainment. 42 U.S.C. § 7502(a)(1)(A). The significance of classification is that nonattainment areas bearing different classifications may be given different attainment dates.

Subpart 1 contains a number of specific requirements for the SIPs in nonattainment areas. For example, these SIPs must require "reasonable further progress" toward attaining the NAAQS. With respect to timing, Subpart 1 provides that the attainment date for areas not meeting a primary NAAQS is "as

expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment . . ." 42 U.S.C. §7502(a)(2)(A).

Subpart 2. Subpart 2 imposed new, more specific requirements on areas that had not attained the ozone standard existing in 1990, when Subpart 2 was enacted. Like Subpart 1, Subpart 2 prescribes both the general content of SIPs and the deadlines for meeting statutory requirements and achieving the NAAQS. The specific requirements and deadlines depend on an area's classification.

Section 181 of Subpart 2 provides, as its title says, "classifications and attainment dates for 1989 nonattainment areas." 42 U.S.C. § 7511. Areas "designated nonattainment for ozone pursuant to section 7407(d)" are to be "classified at the time of such designation, under table 1, by operation of law ..." *Id.* § 7511(a)(1). The classifications in table 1 range from "marginal" to "extreme." *Id.* § 7511(a)(1). These classifications are tied to the area's "design value," which is measured in parts per million ("ppm") of ozone in the ambient air. *Id.* § 7511(a)(1) (table 1, n. *).

The design values in table 1 of section 181(a)(1) range from 0.121 to 0.280 and above. 42 U.S.C. § 7511(a)(1). The level of the ozone standard in effect when section 181(a)(1) was enacted was 0.12 ppm. Ozone Final Rule, at 38,857. Thus the lowest of the "design values" reflected in table 1 of section 181(a)(1) is also the lowest ozone concentration that would have qualified an area as nonattainment under the ozone standard that existed in 1990.

Subpart 2's specific requirements for SIPs are set forth in sections 182-185B. 42 U.S.C. § 7511a-f. The requirements escalate with each classification. See *id.*§ 7511a(a)-(e). All

nonattainment areas must meet the requirements set for any areas with lower design values, plus additional, more stringent requirements. For "marginal" areas, the SIP requirements largely track those of Subpart 1. *Id.* § 7511a(a). Areas classified as "moderate" and above must also, for example, measure their "baseline emissions" of ozone precursors in 1990, and then demonstrate "reasonable further progress" – measured according to specific percentage reductions in emissions – at regular intervals. *Id.* §§ 7511a(b)(1), (c)-(e).

With respect to timing, section 181(a)(1) requires that attainment of the NAAQS be achieved "as expeditiously as practicable but not later than" the dates specified in that section. 42 U.S.C. § 7511(a)(1). These dates range from 1993 to 2010. *Id.* § 7511(a)(1). States must also meet each of the SIP requirements described above within a specified number of years. Subpart 2 consistently specifies November 15, 1990, as the date when the deadline "clock" for the SIP requirements begins to run. *Id.* §§ 7511a(a)-(g).

Interstate Pollution. Air pollution does not respect political boundaries. The Clean Air Act acknowledges this physical reality in provisions that specifically target interstate air pollution. Section 110(a)(2)(D) requires states to include within their SIPs provisions to prevent sources within their borders from "contribut[ing] significantly" to nonattainment in other states. 42 U.S.C. § 7410(a)(2)(D). Section 110(k)(5) requires EPA to call for revisions to a SIP when the SIP is inadequate. 42 U.S.C. § 7410(k)(5). Such an action by EPA is known as a "SIP call." A SIP call may be based on EPA's finding that sources within a state are contributing significantly to nonattainment in another state. This finding – called a "section 126 finding" after the section of the Clean Air Act that permits it – may be requested of EPA by any state experiencing the ill effects of interstate pollution. 42 U.S.C. § 7426(b).

B. Rulemakings on Particulate Matter and Ozone

1. Particulate Matter

Particulate matter ("PM") refers to a broad class of diverse substances that exist as discrete particles over a wide range of sizes. Particles originate from a variety of stationary and mobile sources as well as from natural sources. EPA first promulgated a NAAQS for PM in 1971. 36 Fed. Reg. 8186 (1971). In July 1987, EPA revised the standard, changing *inter alia*, the PM indicator from total suspended particles to particulate matter with an aerodynamic diameter of less than or equal to a nominal ten micrometers ("PM_{10}"). 52 Fed. Reg. 24,854 (1987).

In April 1994, EPA announced its intention to develop a revised air quality criteria document for PM. The focus of the review was recent epidemiological evidence reporting associations between ambient concentrations of PM and a range of serious health effects, including effects caused by particulates with an aerodynamic diameter far smaller than ten micrometers ("PM_{10}"). During the next two years, the agency held several workshops, provided opportunities for public comment on a draft criteria document, and sponsored CASAC review of the document at public meetings.

On November 27, 1996, EPA announced its proposed decision to revise the PM NAAQS. 61 Fed. Reg. 65,638 (1996). EPA proposed adding two new PM NAAQS that measured particulates with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers ("$PM_{2.5}$"). The proposal also specified several other key parameters for the revised standards: (1) concentration (level); (2) averaging time (the period over which pollutant levels are averaged in measuring compliance); and (3) form (the air quality statistic used as a

basis for determining compliance with the standard). The Administrator described several alternative standards using these parameters, including possible changes in the then-existing PM_{10} NAAQS. *Id.* at 65,662.

On July 18, 1997, EPA announced final revisions to its PM NAAQS. 62 Fed. Reg. 38,652 (1997). The Administrator determined that it was appropriate to establish new annual and 24-hour NAAQS for $PM_{2.5}$ and to revise the current 24-hour PM_{10} standard.[5] The Administrator noted that that the agency had undertaken an especially rigorous review and reanalysis of existing scientific data and that recent studies provided "evidence that serious health effects (mortality, exacerbation of chronic disease, increased hospital admissions, etc.) are associated with exposures to ambient levels of PM found in contemporary U.S. urban airsheds even at concentrations below current U.S. PM standard." *Id.* at 38,655. The Administrator further described the results of risk assessments of two cities that, while accompanied by significant scientific uncertainty, "found that the risk remaining after attaining the current PM_{10} standards was on the order of hundreds of premature deaths each year, hundreds to thousands of respiratory-related hospital admissions, and tens of thousands of additional respiratory related symptoms in children." *Id.* at 38,656.

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[5]For $PM_{2.5}$, the EPA set a level of 15 $\mu g/m^3$ with compliance measured based on the three-year average of the annual artithmetic mean $PM_{2.5}$ concentrations from single or multiple community-oriented monitors, and also set a level of 65 $\mu g/m^3$ based on the three-year average of the 98th percentile of 24-hour $PM_{2.5}$ concentrations at each population-oriented monitor within an area. For PM_{10}, EPA changed the form of the standard. PM Final Rule, 62 Fed. Reg. at 38,652.

2. Ozone

Ground-level ozone is formed as a result of chemical reactions of volatile organic compounds, nitrogen oxides, and oxygen in the presence of sunlight. EPA first issued a NAAQS for ozone (or "photochemical oxidants") in 1971. 36 Fed. Reg. 8187 (1971). The original standard specified a maximum level of 0.08 ppm, averaged over one hour, with one exceedance allowed per year. That standard was revised in 1979 by increasing the allowable level to 0.12 ppm. 44 Fed. Reg. 8202 (1979).

The EPA initiated a review of the air quality criteria and standards for ozone in August 1992. In an iterative process involving EPA staff, CASAC, and the public, EPA developed a criteria document on the health and welfare effects of ozone. On November 27, 1996, EPA proposed to revise the NAAQS for ozone. 61 Fed. Reg. 65,716. EPA proposed to replace the one-hour, 0.12 ppm primary standard with an eight-hour, 0.08 ppm standard, with a new form for measuring compliance with the standard. The proposal solicited comments on alternative standards reflecting different levels, averaging times, and forms. *Id.* at 65,731, 65,733.

On July 18, 1997, EPA announced final revisions to its ozone NAAQS. 62 Fed. Reg. 38,856 (1997). The final rule set a level of 0.08 ppm, with an averaging time of eight hours and a form based on the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area. *Id.* at 38,873.

In revising the ozone standard, the Administrator invoked a large body of scientific evidence consisting of clinical, epidemiological, and animal studies revealing the adverse effects of ozone at levels allowed by the previous standard. 62 Fed. Reg. at 38,863-65. She cited "clear evidence from human clinical studies" showing that the adverse effects from exposure to ozone include "lung function decrements, respiratory symptoms (e.g., cough, pain on deep inspiration), nonspecific bronchial responsiveness, and biochemical indicators of pulmonary inflammation." *Id.* at 38,863. The Administrator also cited the "numerous epidemiological studies [that] have reported excess hospital admissions and emergency department visits for respiratory causes (for asthmatic individuals and the general population) attributed primarily to ambient [ozone] exposures, including [ozone] concentrations below the level of the current standard, with no discernible threshold at or below this level." *Id.* at 38,864.

In setting the parameters for the revised ozone standard, the Administrator noted that CASAC had unanimously endorsed an eight-hour averaging period and that all CASAC members who had expressed specific opinions on the form of the standard had favored a form allowing multiple exceedances (as the final rule did). 62 Fed. Reg. at 38,861, 38,869. As for the level of the standard, the Administrator acknowledged that no one correct policy response emerged from the scientific evidence. *Id.* at 38,863. In choosing between levels of 0.09, 0.08, and 0.07, however, the Administrator placed "great weight" on the fact that no member of CASAC had endorsed the 0.07 level, and stressed that severity of effects decreased, and uncertainty increased, at levels below 0.08 ppm. *Id.* at 38,854, 38,868. In rejecting the 0.09 ppm level, the Administrator emphasized that such a standard would result in many more adverse health

effects, particularly among children, than would the 0.08 ppm level. *Id.* at 38,867-68.[6]

C. The Court of Appeals' Initial Decision

Pursuant to section 107(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1), numerous parties filed petitions for review of EPA's revised standards in the D.C. Circuit.

1. Delegation

The D.C. Circuit found that EPA's application of the Clean Air Act in these rulemakings effected a "delegation of legislative power" in violation of Article I, § 1, of the Constitution. (App. 3.) The court explained that "EPA appears to have articulated no 'intelligible principle' to channel its application of the[] factors [it uses in setting NAAQS]; nor is one apparent from the statute." (App. 4.)

The court came to this conclusion based on its review of EPA's 1997 rulemakings on PM and ozone. The court found the agency's explanations for its rules constitutionally deficient because they did not identify a "stopping point" for regulation. (App. 10.) Although the court agreed that the factors EPA considers in setting air quality standards – such as the nature

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[6]In both rulemakings, EPA went to extraordinary lengths to facilitate public participation: the agency established a toll-free telephone hotline; set up a system enabling electronic comments via the Internet; held multiple public meetings at which over 400 citizens and organizations testified; fielded over 14,000 phone calls and over 4,000 electronic mail messages; and held two national satellite telecasts to answer questions. EPA also received over 50,000 written and verbal comments. 62 Fed. Reg. at 38,654; 62 Fed. Reg. at 38,858.

and severity of health effects, the size of the affected population, and the kind of health information available and the uncertainties surrounding it – were reasonable, it concluded that these factors "do not themselves speak to the issue of degree." (App. 6.) The court also dismissed as irrelevant the exhaustive scientific review underlying EPA's standards. (App. 8.)

The court remanded the case to the agency rather than overturning the pertinent statutory provisions outright. The court acknowledged that its approach would not satisfy what it called a "key function of non-delegation doctrine," which is to ensure that Congress, not the agency, exercises legislative authority. (App. 12-13.) Indeed, the court conceded that under its approach, "[t]he agency will make the fundamental policy choices." (App. 13.)

In closing, the court suggested the kinds of standards that might pass constitutional muster after remand. Cost-benefit analysis was the court's first proposal, but the court acknowledged that this option was not open to EPA given the D.C. Circuit's rulings interpreting the Clean Air Act to forbid the consideration of costs. (App. 13.) Alternatively, the court appeared to endorse the possibility of setting environmental standards according to their effect on "quality-adjusted life-years," although it conceded that the Department of Health and Human Services had determined that an approach of this sort utilized by Oregon in the health-care context violated the Americans with Disabilities Act. (App. 15 n. 5.)

2. Enforcement of Ozone Standard

The D.C. Circuit also addressed claims that EPA could neither issue nor enforce a revised ozone standard. The court found that EPA could indeed issue a revised ozone standard, and also designate areas as nonattainment under the revised

standard. (App. 31-34.) However, the court also concluded that EPA could not enforce a revised ozone standard "other than in accordance with the classifications, attainment dates, and control measures set out in Subpart 2." (App. 31.)

In other words, with respect to the *timing* of the achievement of the revised ozone standard, the court of appeals' ruling means that EPA may not prescribe *attainment dates* different from those specified in section 181(a)(1). EPA also may not *classify* a nonattainment area other than in accordance with the requirements of section 181(a)(1). As for the *means* of achieving the revised ozone NAAQS, the court of appeals barred EPA from requiring any control measures other than those required by Subpart 2. (App. 31.)

The court found that section 181(a)(1), 42 U.S.C. § 7511(a)(1), was unambiguous. Because section 181(a)(1) refers to nonattainment designations made under "section 7407(d)," the court concluded that the classifications and attainment dates specified by section 181(a)(1) apply to areas designated as nonattainment under any of the provisions of section 107(d). (App. 34-35.) This meant, according to the court, that areas designated nonattainment under section 107(d)(1), following the revision of a NAAQS, are also governed by Subpart 2. Having found the statute clear, the court refused to defer to EPA's interpretation, which allowed enforcement of the revised standard outside of Subpart 2. (App. 37-39.)

The court suggested that any other interpretation of section 181(a)(1) would not make sense. The court appeared to endorse the reasoning of petitioners below that "because the 1990 amendments extended the time for nonattainment areas to comply with the 0.12 ppm ozone NAAQS, they must preclude EPA from requiring areas to comply either more quickly or with a more stringent ozone NAAQS." (App. 37.)

D. The Court of Appeals' Partial Grant of Rehearing and Denial of Rehearing En Banc

1. Delegation

The panel voted 2-1 to deny rehearing on the question whether the Clean Air Act as applied in the PM and ozone rulemakings unconstitutionally delegates legislative authority to the executive. (App. 64-82.)

The court of appeals voted 5-4 in favor of rehearing the delegation question *en banc*, but rehearing *en banc* was nevertheless denied. (App. 84.) Judge Silberman wrote a dissent from the denial of rehearing *en banc*. (App. 85-89.)

2. Enforcement of Ozone Standard

The panel granted rehearing in part on the question whether the revised ozone standard could be enforced. The panel replaced the language in its initial opinion stating that EPA "cannot be enforced by virtue of Clean Air Act § 181(a)" (App. 53) with language stating that EPA could enforce a revised standard "only in conformity with Subpart 2." (App. 75.)[7]

Judge Tatel concurred in the partial grant of rehearing. He believed that the modified opinion left "open the possibility that EPA can enforce the new ozone NAAQS without conflicting with Subpart 2's classifications and attainment dates." (App. 76.) He found that EPA may enforce the revised standard in

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[7]The panel also modified its opinion to clarify that "Subpart 2 erects no bar to the EPA's requiring compliance with a revised secondary ozone NAAQS 'as expeditiously as practicable.'" (App. 74.)

areas that have attained the former ozone standard, but not in areas that have not yet attained that standard. (App. 81.)

REASONS FOR GRANTING THE PETITION

The D.C. Circuit's constitutional ruling is inconsistent with over six decades of decisions from this Court upholding broad assignments of authority from the legislative to the executive branch. In comparison with standards this Court has upheld, the Clean Air Act is far more restrictive of agency discretion. Nothing in this Court's nondelegation jurisprudence sanctions the court of appeals' unusual approach to delegation, according to which the agency to which unconstitutionally broad discretion has supposedly been granted must supply quantitative limits for its own discretion.

In addition, in preventing EPA from enforcing its revised ozone standard, the court of appeals ignored the clear language of the Clean Air Act. The result is to create a bizarre regulatory scheme that is at odds with the Act's language and purposes. At the very least, the court of appeals should have deferred to EPA as to the meaning of the relevant statutory provisions.

The D.C. Circuit's decision has enormous immediate significance for the entire country. The decision places states' regulatory obligations in a posture of extreme uncertainty, and has enormous implications for the public health. There is now no NAAQS in place in most of the country for ozone. In addition, the ruling has delayed, and partially undermined, petitioners' longstanding efforts to reduce interstate air pollution that places their citizens' health at risk.

There is no reason to wait for a circuit split to develop as to the constitutionality of the Clean Air Act or the enforceability of the revised ozone standard. Such a split is impossible: only

the D.C. Circuit may review nationally applicable standards issued under the Clean Air Act. 42 U.S.C. § 7607(b)(1). Thus immediate review in this Court is warranted.

I. THE COURT OF APPEALS' DECISION IS INCONSISTENT WITH THIS COURT'S RULINGS ON THE "DELEGATION" DOCTRINE.

The Clean Air Act establishes minimum requirements for air quality throughout the nation. The court of appeals ruled that this statute, as interpreted by EPA and the courts for the last three decades, is unconstitutional as a delegation of legislative power. In doing so, the court ignored this Court's decisions upholding much broader assignments of authority to administrative agencies than the assignment made by the Clean Air Act. The court compounded its error when it then turned to the agency itself to enunciate an "intelligible principle" in the form of a meta-standard to govern future rulemakings.

In holding that the Clean Air Act enunciates no "intelligible principle" limiting agency action, the court of appeals departed from over six decades of unbroken precedent from this Court finding such a principle in statutes far less constraining than the Clean Air Act. During this period, this Court has, "without deviation," upheld Congress's authority to seek assistance from administrative agencies under "broad standards." *Mistretta v. United States*, 488 U.S. 361, 373 (1989). For example, this Court has affirmed the Federal Communications Commission's authority to regulate broadcast licensing in the "public interest," *National Broadcasting Co. v. United States*, 319 U.S. 190, 225-26 (1943), and to issue regulations "as public convenience, interest, or necessity requires," *United States v. Southwestern Cable Co.*, 392 U.S. 157, 178 (1968); the Federal Power Commission's authority to determine "just and reasonable" rates, *FPA v. Hope Natural Gas Co.*, 320 U.S. 591, 600 (1944);

and the Attorney General's authority – even absent notice and comment rulemaking – to designate controlled substances and criminalize their manufacture, possession, and use, *Touby v. United States*, 500 U.S. 160 (1991).

The Clean Air Act constrains agency discretion at least as much as the statutory standards this Court has previously upheld. First, NAAQS apply to only a handful of pollutants – widespread pollutants (i.e., those from "numerous and diverse sources") that endanger public health or welfare. Thus the territory over which EPA's discretion may range is limited.

Second, the Act requires extensive scientific inquiry into the nature and severity of harm caused by an air pollutant. The development of criteria documents, identifying the "kind and extent of all identifiable effects on public health or welfare," 42 U.S.C. § 7408(a)(2), and the submission of the criteria documents and NAAQS themselves to CASAC's review, *id.* § 7409(d)(2)(B), ensure that NAAQS will emerge from the best available scientific evidence.

Third, in actually setting NAAQS, EPA's discretion is constrained in several important ways. NAAQS must be set at a level which, "allowing an adequate margin of safety, are requisite to protect the public health." 42 U.S.C. § 7409(b)(1). The use of the term "requisite" limits EPA's standard-setting discretion on the low end. In addition, NAAQS must be "based on" the air quality criteria. *Id.* § 7409(b)(1). These criteria must themselves be based on the latest scientific information as to the "kind and extent" of effects of the relevant air pollutants on human health and welfare. *Id.* § 7408(a)(2). By explicitly focusing the scientific inquiry on the "kind and extent" of human health effects, the Act communicates to EPA an intent to distinguish among health effects based on their severity and magnitude. This is just what EPA did in the rules at issue here.

See, e.g., Ozone Final Rule, 62 Fed. Reg. at 38,859, 38,860, 38,864. Moreover, the Administrator may significantly depart from CASAC's recommendations only if she explains why she has done so. *Id.* § 7607(d)(3). In this case, when CASAC was able to achieve a consensus, the Administrator's actions hewed closely to it. In setting the ozone standard, for example, the Administrator considered ozone levels only within a range approved by CASAC, and declined to set the standard at the lowest end of that range in part because no member of CASAC had endorsed such a low standard. Ozone Final Rule, 62 Fed. Reg. at 38,861, 38,868.

Finally, the Administrator's discretion in promulgating NAAQS is constrained by the fact that her actions are subject to the exacting requirements of the Administrative Procedure Act, and are subject to judicial review for arbitrariness. This Court has suggested that procedural requirements and the availability of judicial review are important factors in evaluating the propriety of Congress's assignments of authority to the executive branch. *American Power & Light Co. v. SEC*, 329 U.S. 90, 105 (1946); *Touby v. United States*, 500 U.S. 160, 168-69 (1991).

Given the constraints the Clean Air Act imposes on EPA, the Act should have unquestionably survived constitutional scrutiny under this Court's precedents. However, even though the court of appeals explicitly held that the Clean Air Act does not provide the "intelligible principle" necessary for purposes of the delegation doctrine (App. 4), the court did not look in any detail at what the Clean Air Act does. Instead, it examined what EPA did, and concluded that because EPA had not identified a precise "stopping point" for regulation, its actions were unconstitutional. (App. 10.) Although the court of appeals did not say so explicitly, close examination of the alternative approaches the court endorsed reveals that the court appears to

have believed that EPA must – as a matter of constitutional principle – *quantify* the point at which it will stop regulating to protect human health. (App. 13, 15 (proposing cost-benefit analysis and "quality-adjusted life-years" as antidotes to an unconstitutional delegation)).

In not one of the "nondelegation" cases cited above did the statutory standard upheld by this Court specify a precise stopping point for achievement of desired ends such as the public interest and justice. And in none of these cases did this Court suggest that the *agency* must supply such a stopping point if Congress does not. Allowing an agency to supply the "intelligible principle" that this Court has required (and the court of appeals erroneously found lacking here) is perverse in light of the essential purpose of the nondelegation doctrine, which is to ensure that Congress, not the agency, makes basic policy choices. By requiring of the agency a precise stopping point for regulation, the court below introduced a principle new to constitutional law – that agencies must, in advance of specific rulemakings, develop a meta-standard quantifying the precise tradeoffs they will make among the broad purposes they are charged to serve.

II. THE COURT OF APPEALS' DECISION BLOCKING ENFORCEMENT OF THE REVISED OZONE STANDARD IS INCONSISTENT WITH THE CLEAN AIR ACT'S LANGUAGE AND PURPOSES, AND WITH EPA'S REASONABLE INTERPRETATION OF THE ACT.

The court of appeals held that EPA was required to review the ozone standard, and to revise it if appropriate, every five years, and also to designate areas as nonattainment for ozone in light of the revised standard. (App. 31-34.) Nevertheless, the court held that EPA could not enforce this revised standard

"other than in accordance with the classifications, attainment dates, and control measures set out in Subpart 2." (App. 31.) EPA may not, in other words, require the states to do anything more to achieve the revised ozone NAAQS than they were already required to do in order to achieve the former ozone NAAQS.

In short, according to the D.C. Circuit, EPA can be required by section 109 to promulgate a revised ozone standard necessary to safeguard public health and welfare but the agency is powerless to enforce that standard no matter how serious and widespread the public health consequences of such compelled agency inaction. Nowhere, however, does the Clean Air Act suggest, let alone compel, a finding that Congress intended such a perverse result.[8]

Certainly, section 181, upon which the D.C. Circuit relied (App. 35), reveals no indicia of such congressional intent.

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[8]In concurring in the partial grant of rehearing, Judge Tatel read the revised majority opinion as allowing EPA to enforce the revised ozone standard in areas that have attained the former standard. (App. 81.) Given the critical importance of this issue, the panel's failure to engage Judge Tatel's view creates doubt as to whether this interpretation is accurate. In addition, the panel's explanation for its decision not to vacate the revised ozone standard – that the standard was not "likely to engender costly compliance activities"in light of the court's holding on Subpart 2 (App. 75) – is hard to reconcile with Judge Tatel's perspective on the panel's opinion. In any event, even if Judge Tatel's interpretation of the panel's opinion were accurate, the panel's opinion still raises enormous legal and practical problems regarding EPA enforcement of the new standard in areas that have *not* attained the former standard.

Section 181(a)(1), table 1, provides classifications and attainment dates only for the former ozone standard, not for the revised standard. This is clear from the language of the provision itself. First, table 1 of section 181(a)(1) classifies areas according to a "design value" which is measured in parts per million ("ppm"). The lowest design value reflected in table 1 is 0.121 ppm. The range of design values in table 1 is thus clearly keyed to the former ozone standard of 0.120 ppm. This interpretation is reinforced by the title of section 181(a)(1), "Classification and attainment dates for 1989 nonattainment areas"; this language also indicates that section 181(a)(1) specifies classifications and attainment dates only for areas in nonattainment for the ozone standard existing in 1990.

The court's ruling also makes a hash of section 181(a)(1)'s language specifying the procedure for designation and classification. According to the court, EPA must designate areas as nonattainment (or attainment, or unclassifiable) under the revised, eight-hour, 0.08 ppm ozone standard. (App. 33-34.) Because section 181(a)(1) provides that classification must occur "at the time of . . . designation," 42 U.S.C. § 7511(a)(1), EPA will also be required, at the same time, to *classify* the areas designated as nonattainment under the revised standard. However, section 181(a)(1) also requires that classifications be based on the design value as calculated by the interpretation methodology existing in November 1990. *Id.* § 7511(a)(1). This methodology looked to the ozone standard existing in 1990, not the revised ozone standard existing now.[9] For this reason, and because the court of appeals has required EPA to

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[9]See Memorandum from William G. Laxton, Director, Technical Support Division, U.S. EPA, "Ozone and Carbon Monoxide Design Value Calculations" (June 18, 1990) (http:www.epa.gov/airprogm/oar/oaqps/greenbk/laxton.html).

classify areas under the terms of section 181(a)(1), EPA's new classifications under the revised standard will be based on design values calculated according to the *former* ozone standard, not the revised standard. Thus, in classifying areas under the revised standard EPA will be required to disregard the design values it calculated in order to designate areas under that standard. The court of appeals' interpretation turns section 181(a)(1) into a kind of parody.

Recognizing that section 181(a)(1) specifies classifications and attainment dates only for the ozone standard in effect in 1990 is also the only way sensibly to reconcile section 181(a)(1) with EPA's continuing responsibility to revise the NAAQS. As the court of appeals itself confirmed (App. 31-34), section 109 of the Clean Air Act requires EPA to review and, if appropriate, revise the NAAQS every five years. After issuing a revised NAAQS, EPA has two years to designate areas as attainment, nonattainment, or unclassifiable. 42 U.S.C. § 7407(d)(1). The review and revision of NAAQS, and the designation of areas according to their attainment status, are resource-intensive, time-consuming processes undertaken for a single purpose: to achieve healthful air quality for the citizens of the country. On the court of appeals' interpretation of the Clean Air Act, however, EPA's obligation to review and revise the ozone NAAQS, and to designate areas according to their attainment status, has no purpose other than to brand areas with the unwelcome label "nonattainment."

There is no warrant, in the language, structure, or history of the Clean Air Act, for requiring EPA to engage in such a pointless endeavor. In the Clean Air Act, Congress established means for EPA to protect public health in light of scientific evidence of the devastating health effects of air pollution – not means for the agency to announce that air quality is bad but at the same time limit EPA's ability to mitigate it.

The reference to "section 107(d)" in section 181(a)(1), on which the court of appeals so heavily relied, does not support a different conclusion. In finding that Congress's failure to refer specifically to section 107(d)(4) (rather than to section 107(d) as a whole), meant that EPA could not enforce the revised ozone standard except in conformity with Subpart 2, the court of appeals ignored all the rest of the language in Subpart 2, which requires the opposite conclusion. The consistent exclusive focus of Subpart 2 is the ozone NAAQS existing at the time Congress added Subpart 2 in 1990.

At the very least, the cascade of language in Subpart 2 indicating that Subpart 2 applies only to the former, one-hour ozone standard, combined with the absence of the single number (4) in section 181(a)(1), creates an ambiguity that EPA is entitled to resolve as long as it does so reasonably. *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837, 866 (1984). As set forth above, EPA's interpretation of Subpart 2 to apply only to the ozone standard existing in 1990 creates a sensible regulatory regime in which EPA is not forced to revise a NAAQS, and to designate areas according to their attainment status under the revised NAAQS, only to be barred from taking steps to achieve the NAAQS.

III. THE COURT OF APPEALS' DECISION WARRANTS REVIEW, NOTWITHSTANDING THE ABSENCE OF A DIRECT CIRCUIT CONFLICT, BECAUSE OF ITS ENORMOUS SIGNIFICANCE BOTH TO THE STATES AND FOR THE PUBLIC HEALTH AND BECAUSE NO SUCH CONFLICT IS POSSIBLE

Review of the court of appeals' ruling is further warranted because of its enormous significance to the states, including

petitioners Massachusetts and New Jersey, and to the public health. The rules at stake in this litigation are among the single most important national environmental standards promulgated in over a decade. They implicate the viability of massive regulatory programs which rely upon both the validity and enforceability of the revised ozone and PM NAAQS. Also at stake are the thousands of deaths and hundreds of thousands of illnesses that the Administrator concluded would be prevented only by attainment of the revised NAAQS. These enormous stakes alone would warrant this Court's review, even without a circuit conflict. Certainly, the absence of such a conflict should not bar this Court's review where, as here, the D.C. Circuit's exclusive jurisdiction makes the development of such a conflict impossible.[10]

A. The Ruling Has Great Practical Significance for the States.

All states have an interest, as sovereigns, in being certain of their rights and responsibilities under the Clean Air Act. The D.C. Circuit's ruling has placed those rights and responsibilities in a posture of extreme uncertainty in two respects: (1) the ruling has delayed and undermined longstanding efforts to reduce interstate air pollution; and (2) the former ozone

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[10]Petitioners have not sought review as to two other issues decided below. The court held that EPA should have considered the alleged health benefits of ozone in setting the ozone standard, and that EPA's choice of PM_{10} as an indicator for coarse particulate matter was arbitrary and capricious. (App. 41-50.) Unlike the court's rulings on delegation and on the enforceability of the revised ozone standard, these rulings do not undermine the entire analytical framework and implementation scheme on which the Clean Air Act depends.

standard has been revoked in most of the country and, as a result of the D.C. Circuit's ruling on Subpart 2 of the Clean Air Act, no enforceable standard has taken its place.

The ruling below has undermined petitioners' longstanding efforts to reduce the pollution that arrives inside their borders from other states. These efforts have led to "SIP calls" from EPA, requiring certain states to develop plans to reduce their emissions of oxides of nitrogen (major ozone precursors) in order to facilitate compliance with the NAAQS for ozone. *See* Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone, 63 Fed. Reg. 57,356 (Oct. 27, 1998). Petitioners' efforts have also resulted in "section 126 findings" from EPA, concluding that sources from other states have "significantly contribute[d]" to Massachusetts' failure to attain the air quality standard for ozone. *See* Findings of Significant Contribution and Rulemaking on Section 126 Petitions for Purposes of Reducing Interstate Ozone Transport; Final Rule, 65 Fed. Reg. 2674 (Jan. 18, 2000).

The ruling below has hindered petitioners' efforts to reduce interstate air pollution. As a result of the ruling, EPA scaled back its section 126 findings that other states were significantly contributing to the section 126 petitioners' inability to meet national air quality standards. *See* 64 Fed. Reg. 28,294-95 (tables showing broader geographic coverage under revised, eight-hour standard than under former, one-hour standard). In addition, the D.C. Circuit has temporarily stayed the "SIP calls" described above. Order on Stay, *State of Michigan v. EPA*, No. 98-1497 (D.C. Cir.) (May 25, 1999).

In short, the D.C. Circuit's ruling has had large ripple effects on the nation's program for achieving clean air. In holding the

ozone standard unlawful on constitutional grounds, and in blocking the enforcement of the ozone standard, the D.C. Circuit has, apparently unwittingly,[11] rent asunder EPA's carefully crafted, multi-prong, multi-state attack on ozone. It has also rendered more difficult petitioners' efforts to protect the health of their citizens through achievement of the NAAQS.

In addition, as a result of the ruling, there is now no enforceable ozone standard in effect in most of the country. In 1997, in light of the promulgation of revised standards for PM and ozone, President Clinton issued a memorandum to EPA in which he ordered EPA to begin revoking the former standards for ozone and PM in areas that had not exceeded those standards for three years. 62 Fed. Reg. 38,421 (July 16, 1997). EPA subsequently determined that the one-hour ozone standard was no longer applicable in 2,945 of the nation's 3,153 counties. 63 Fed. Reg. 31,014 (June 5, 1998); 63 Fed. Reg. 34,432 (July 22, 1998); 64 Fed. Reg. 30,911 (June 9, 1999).

EPA has issued a proposed rule rescinding its revocation of the one-hour ozone standard. Rescinding Findings that the 1-Hour Ozone Standard No Longer Applies in Certain Areas, 64 Fed. Reg. 57,424 (Oct. 25, 1999). The ultimate legal status of EPA's rescission of its revocation of the ozone standard has yet to be determined. This much is certain, however: there is now no enforceable ozone standard in place in most of the country, and the decision below has at least cast a shadow over EPA's

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[11] A recent opinion written by Judge Williams asserts that the 0.12 ppm, one-hour ozone standard "remains in place." *American Petroleum Institute v. EPA*, 2000 U.S. App. LEXIS 14 *4 n. 1 (Jan. 4, 2000). However, as discussed in this section, that standard has been revoked in most of the country.

efforts to reinstate the former ozone standard. This situation creates enormous uncertainty for the states as regulators.

This uncertainty is exacerbated by the precipitousness of the D.C. Circuit's ruling on delegation. The court failed to consider many nonconstitutional issues presented to it, delaying their resolution until EPA complied with the court's new constitutional rule. (App. 4.) The court's decision threatens to turn this rulemaking into an endless, iterative process in which the agency must seek serial judicial approval of its standards. This places the states in the untenable position of trying to respond to complex standards that may, or may not, be undone by the next round of judicial review.

B. The Implications for Public Health Are Enormous.

In 1997, EPA found that the existing standards for PM and ozone were inadequate to protect the public health. Indeed, it concluded that if the existing standards were left in place, as many as 15,000 people would die prematurely, and hundreds of thousands more would fall ill, experience respiratory problems, miss work or school, and/or be admitted to the hospital, *every year*. These factual findings were reached after multiple exchanges between EPA and CASAC regarding the latest scientific evidence of the public health effects of PM and ozone. Because the court of appeals struck down the NAAQS and never disputed these factual findings, the enormous public health consequences of that ruling cannot now be gainsaid.

C. A Direct Circuit Conflict Is Impossible.

The absence of a direct circuit conflict does not counsel against this Court's review. Judicial review of nationally applicable regulations promulgated under the Clean Air Act is available exclusively in the D.C. Circuit. 42 U.S.C. §

7607(b)(1). Thus a circuit split will never develop as to the constitutional and statutory questions presented here. Unless this Court grants review of the D.C. Circuit's decision, a panel opinion of just two judges – which a majority of the judges participating in the decision whether to rehear the case *en banc* believed sufficiently problematic to warrant *en banc* review – will govern the validity and enforceability of the national air quality program.

If allowed to stand, the two-judge ruling on delegation will control not only EPA's standards for PM and ozone, but also its standards for the other air pollutants regulated by NAAQS. The agency is just now in the process of reworking its standard for sulfur dioxide.[12] Given the monumental amount of time and resources involved in reviewing and revising NAAQS, this Court's immediate review is warranted to prevent EPA's standard-setting process from taking place under a cloud of constitutional doubt.

In reaching the question of delegation, two judges held invalid EPA's administration of what is perhaps the nation's premier environmental program on the basis of a perfunctory, one-sentence argument in two parties' briefs. This Court's review is warranted in order to give the constitutional question, and the Clean Air Act itself, the careful hearing they deserve.

CONCLUSION

The petition for a writ of certiorari should be granted.

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[12]Statement of Regulatory and Deregulatory Priorities, 64 Fed. Reg. 64,023, 64,030 (Nov. 22, 1999).

Respectfully submitted.

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App. 1

No. 97-1440

AMERICAN TRUCKING ASSOCIATIONS, ET AL.,
Petitioners

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
Intervenors

Consolidated with
Nos. 97-1546, 97-1548, 97-1551, 97-1552, 97-1553, 97-1555, 97-1559, 97-1561, 97-1562, 97-1565, 97-1567, 97-1571, 97-1573, 97-1574, 97-1576, 97-1578, 97-1579, 97-1583, 97-1583, 97-1586, 97-1587, 97-1588, 97-1592, 97-1594, 97-1596, 97-1597, 97-1598

No. 97-1441

AMERICAN TRUCKING ASSOCIATIONS, ET AL.,
Petitioners

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
Intervenors

Consolidated with

App. 2

Nos. 97-1502, 97-1505, 97-1508, 97-1509, 97-1510, 97-1512, 97-1513, 97-1514, 97-1518, 97-1519, 97-1526, 97-1531, 97-1539, 97-1566, 97-1568, 97-1570, 97-1572, 97-1575, 97-1584, 97-1589, 97-1591, 97-1595, 97-1619

On Petitions for Review of an Order of the Environmental Protection Agency

United States Court of Appeals, District of Columbia Circuit

Argued December 17, 1998. Decided May 14, 1999.

Before WILLIAMS, GINSBURG, and TATEL, *Circuit Judges*. TATEL, *Circuit Judge*, concurring in part and dissenting in part.

* Judge Williams wrote Parts I and III.B; Judge Ginsburg wrote Parts II, III.A, and IV.D; Judge Tatel wrote Parts IV.A-C.

PER CURIAM:

Introduction

The Clean Air Act requires EPA to promulgate and periodically revise national ambient air quality standards ("NAAQS") for each air pollutant identified by the agency as meeting certain statutory criteria. See Clean Air Act §§ 108-09, 42 U.S.C. §§ 7408-09. For each pollutant, EPA sets a "primary standard"--a concentration level "requisite to protect the public health" with an "adequate margin of safety"--and a "secondary standard"--a level "requisite to protect the public welfare." Id. § 7409(b).

In July 1997 EPA issued final rules revising the primary and secondary NAAQS for particulate matter ("PM") and ozone. See National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652 (1997) ("PM Final Rule"); National Ambient Air Quality Standards for Ozone, 62 Fed. Reg. 38,856 (1997) ("Ozone Final Rule"). Numerous petitions for review have been filed for each rule.

In Part I we find that the construction of the Clean Air Act on which EPA relied in promulgating the NAAQS at issue here effects an unconstitutional delegation of legislative power. See U.S. Const. art. I, § 1 ("All legislative powers herein granted shall be vested in a Congress of the United States."). We remand the cases for EPA to develop a construction of the act that satisfies this constitutional requirement.

In Part II we reject the following claims: that § 109(d) of the Act allows EPA to consider costs; that EPA should have considered the environmental damage likely to result from the NAAQS' financial impact on the Abandoned Mine Reclamation Fund; that the NAAQS revisions violated the National Environmental Policy Act ("NEPA"), Unfunded Mandates Reform Act ("UMRA"), and Regulatory Flexibility Act ("RFA").

In Part III we decide two ozone-specific statutory issues, holding that the 1990 revisions to the Clean Air Act limit EPA's ability to enforce new ozone NAAQS and that EPA cannot ignore the possible health benefits of ozone.

Finally, in Part IV we resolve various challenges to the PM NAAQS. We agree with petitioners that EPA's choice of PM_{10} as the indicator for coarse particulate matter was arbitrary and capricious; we reject petitioners' claims that EPA must treat $PM_{2.5}$ as a "new pollutant," that EPA must identify a biological

mechanism explaining PM's harmful effects, and that the Clean Air Act requires secondary NAAQS to be set at levels that eliminate all adverse visibility effects.

The remaining issues cannot be resolved until such time as EPA may develop a constitutional construction of the act (and, if appropriate, modify the disputed NAAQS in accordance with that construction).

I. Delegation

Certain "Small Business Petitioners" argue in each case that EPA has construed §§ 108 & 109 of the Clean Air Act so loosely as to render them unconstitutional delegations of legislative power. We agree. Although the factors EPA uses in determining the degree of public health concern associated with different levels of ozone and PM are reasonable, EPA appears to have articulated no "intelligible principle" to channel its application of these factors; nor is one apparent from the statute. The nondelegation doctrine requires such a principle. See J.W. Hampton, Jr. & Co. v. United States, 276 U.S. 394, 409, 72 L. Ed. 624, 48 S. Ct. 348 (1928). Here it is as though Congress commanded EPA to select "big guys," and EPA announced that it would evaluate candidates based on height and weight, but revealed no cut-off point. The announcement, though sensible in what it does say, is fatally incomplete. The reasonable person responds, "How tall? How heavy?"

EPA regards ozone definitely, and PM likely, as nonthreshold pollutants, i.e., ones that have some possibility of some adverse health impact (however slight) at any exposure level above zero. See Ozone Final Rule, 62 Fed. Reg. at 38,863/3 ("Nor does it seem possible, in the Administrator's judgment, to identify [an ozone concentration] level at which it can be concluded with confidence that no 'adverse' effects are

likely to occur."); National Ambient Air Quality Standards for Ozone and Particulate Matter, 61 Fed. Reg. 65,637, 65,651/3 (1996) (proposed rule) ("The single most important factor influencing the uncertainty associated with the risk estimates is whether or not a threshold concentration exists below which PM-associated health risks are not likely to occur."). For convenience, we refer to both as non-threshold pollutants; the indeterminacy of PM's status does not affect EPA's analysis, or ours.

Thus the only concentration for ozone and PM that is utterly risk-free, in the sense of direct health impacts, is zero. Section 109(b)(1) says that EPA must set each standard at the level "requisite to protect the public health" with an "adequate margin of safety." 42 U.S.C. § 7409(b)(1). These are also the criteria by which EPA must determine whether a revision to existing NAAQS is appropriate. See 42 U.S.C. § 7409(d)(1) (EPA shall "promulgate such new standards as may be appropriate in accordance with ... [§ 7409(b)]"); see also infra Part II.A. For EPA to pick any non-zero level it must explain the degree of imperfection permitted. The factors that EPA has elected to examine for this purpose in themselves pose no inherent nondelegation problem. But what EPA lacks is any determinate criterion for drawing lines. It has failed to state intelligibly how much is too much.

We begin with the criteria EPA has announced for assessing health effects in setting the NAAQS for non-threshold pollutants.[1] They are "the nature and severity of the health

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[1]Technically, EPA describes the criteria as used only for setting the "adequate margin of safety." There might be thought to be a separate step in which EPA determines what standard would protect public health without any margin of safety, and that step might be governed by different criteria. But EPA did

effects involved, the size of the sensitive population(s) at risk, the types of health information available, and the kind and degree of uncertainties that must be addressed." Ozone Final Rule, 62 Fed. Reg. at 38,883/2; EPA, "Review of the National Ambient Air Quality Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information: OAQPS Staff Paper," at II-2 (July 1996) ("PM Staff Paper") (listing same factors). Although these criteria, so stated, are a bit vague, they do focus the inquiry on pollution's effects on public health. And most of the vagueness in the abstract formulation melts away as EPA applies the criteria: EPA basically considers severity of effect, certainty of effect, and size of population affected. These criteria, long ago approved by the judiciary, see Lead Industries Ass'n v. EPA, 208 U.S. App. D.C. 1, 647 F.2d 1130, 1161 (D.C. Cir. 1980) ("Lead Industries"), do not themselves speak to the issue of degree.

Read in light of these factors, EPA's explanations for its decisions amount to assertions that a less stringent standard would allow the relevant pollutant to inflict a greater quantum of harm on public health, and that a more stringent standard would result in less harm. Such arguments only support the intuitive proposition that more pollution will not benefit public health, not that keeping pollution at or below any particular level is "requisite" or not requisite to "protect the public health" with an "adequate margin of safety," the formula set out by § 109(b)(1).

Consider EPA's defense of the 0.08 ppm level of the ozone NAAQS. EPA explains that its choice is superior to

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not use such a process, and it need not. See NRDC v. EPA, 284 U.S. App. D.C. 136, 902 F.2d 963, 973 (D.C. Cir. 1990). Thus, the criteria mentioned in the text govern the whole standard-setting process.

retaining the existing level, 0.09 ppm, because more people are exposed to more serious effects at 0.09 than at 0.08. See Ozone Final Rule, 62 Fed. Reg. at 38,868/1. In defending the decision not to go down to 0.07, EPA never contradicts the intuitive proposition, confirmed by data in its Staff Paper, that reducing the standard to that level would bring about comparable changes. See EPA, "Review of National Ambient Air Quality Standards for Ozone: Assessment of Scientific and Technical Information: OAQPS Staff Paper," at 156 (June 1996) ("Ozone Staff Paper"). Instead, it gives three other reasons. The principal substantive one is based on the criteria just discussed:

> The most certain O_3-related effects, while judged to be adverse, are transient and reversible (particularly at O_3 exposures below 0.08 ppm), and the more serious effects with greater immediate and potential long-term impacts on health are less certain, both as to the percentage of individuals exposed to various concentrations who are likely to experience such effects and as to the long-term medical significance of these effects.

Ozone Final Rule, 62 Fed. Reg. at 38,868/2.

In other words, effects are less certain and less severe at lower levels of exposure. This seems to be nothing more than a statement that lower exposure levels are associated with lower risk to public health. The dissent argues that in setting the standard at 0.08, EPA relied on evidence that health effects occurring below that level are "transient and reversible," Dissent at 5, evidently assuming that those at higher levels are not. But the EPA language quoted above does not make the categorical distinction the dissent says it does, and it is far from apparent that any health effects existing above the level are permanent or irreversible.

In addition to the assertion quoted above, EPA cited the consensus of the Clean Air Scientific Advisory Committee ("CASAC") that the standard should not be set below 0.08. That body gave no specific reasons for its recommendations, so the appeal to its authority, also made in defense of other standards in the PM Final Rule, see PM Final Rule, 62 Fed. Reg. at 38,677/2 (daily fine PM standard); id. at 38,678/3 (annual coarse PM standard); id. at 38,679/1 (daily coarse PM standard), adds no enlightenment. The dissent stresses the undisputed eminence of CASAC's members, Dissent at 4, but the question whether EPA acted pursuant to lawfully delegated authority is not a scientific one. Nothing in what CASAC says helps us discern an intelligible principle derived by EPA from the Clean Air Act.

Finally, EPA argued that a 0.07 standard would be "closer to peak background levels that infrequently occur in some areas due to nonanthropogenic sources of O_3 precursors, and thus more likely to be inappropriately targeted in some areas on such sources." Ozone Final Rule, 62 Fed. Reg. at 38,868/3. But a 0.08 level, of course, is also closer to these peak levels than 0.09.

The dissent notes that a single background observation fell between 0.07 and 0.08, and says that EPA's decision "ensured that if a region surpasses the ozone standard, it will do so because of controllable human activity, not uncontrollable natural levels of ozone." Dissent at 6. EPA's language, coupled with the data on background ozone levels, may add up to a backhanded way of saying that, given the national character of the NAAQS, it is inappropriate to set a standard below a level that can be achieved throughout the country without action affirmatively extracting chemicals from nature. That may well be a sound reading of the statute, but EPA has not explicitly adopted it.

EPA frequently defends a decision not to set a standard at a lower level on the basis that there is greater uncertainty that health effects exist at lower levels than the level of the standard. See Ozone Final Rule, 62 Fed. Reg. at 38,868/2; PM Final Rule, 62 Fed. Reg. at 38,676/3 (annual fine PM standard); id. at 38,677/2 (daily fine PM standard). And such an argument is likely implicit in its defense of the coarse PM standards. See PM Final Rule, 62 Fed. Reg. at 38,678/3- 79/1. The dissent's defense of the fine particulate matter standard cites exactly such a justification. See Dissent at 6 ("The Agency explained that 'there is generally greatest statistical confidence in observed associations ... for levels at and above the mean concentration [in certain studies]' ") (emphasis added in dissent). But the increasing-uncertainty argument is helpful only if some principle reveals how much uncertainty is too much. None does.

The arguments EPA offers here show only that EPA is applying the stated factors and that larger public health harms (including increased probability of such harms) are, as expected, associated with higher pollutant concentrations. The principle EPA invokes for each increment in stringency (such as for adopting the annual coarse particulate matter standard that it chose here)--that it is "possible, but not certain" that health effects exist at that level, see PM Final Rule, 62 Fed. Reg. at 38,678/3 [2] --could as easily, for any non-threshold

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[2]EPA did cite qualitative evidence for further support for its annual standard, and argued that the evidence "does not provide evidence of effects below the range of 40-50 Sg/m3," the standard level. PM Final Rule, 62 Fed. Reg. at 38,678/3. The referenced document, however, bears no indication that the qualitative evidence demonstrates effects at the level of the standard, either. See EPA, "Air Quality Criteria for Particulate Matter," at 13-79 (April 1996).

pollutant, justify a standard of zero. The same indeterminacy prevails in EPA's decisions not to pick a still more stringent level. For example, EPA's reasons for not lowering the ozone standard from 0.08 to 0.07 ppm--that "the more serious effects ... are less certain" at the lower levels and that the lower levels are "closer to peak background levels," see Ozone Final Rule, 62 Fed. Reg. at 38,868/2--could also be employed to justify a refusal to reduce levels below those associated with London's "Killer Fog" of 1952. In that calamity, very high PM levels (up to 2,500 Sg/m3) are believed to have led to 4,000 excess deaths in a week.[3] Thus, the agency rightly recognizes that the question is one of degree, but offers no intelligible principle by which to identify a stopping point.

The latitude EPA claims here seems even broader than that OSHA asserted in International Union, UAW v. OSHA ("Lockout/Tagout I"), 291 U.S. App. D.C. 51, 938 F.2d 1310, 1317 (D.C. Cir. 1991), which was to set a standard that would reduce a substantial risk and that was not infeasible. In that case, OSHA thought itself free either to "do nothing at all" or to "require precautions that take the industry to the brink of ruin," with "all positions in between ... evidently equally valid." Id. Here, EPA's freedom of movement between the poles is equally unconstrained, but the poles are even farther apart--the maximum stringency would send industry not just to the brink of ruin but hurtling over it, while the minimum stringency may be close to doing nothing at all.

In Lockout/Tagout I certain special conditions that have justified an exceptionally relaxed application of the nondelegation doctrine were absent, 938 F.2d at 1317-18, and they are equally absent here. The standards in question affect

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[3]See W.P.D. Logan, "Mortality in the London Fog Incident, 1952," The Lancet, Feb. 4, 1953, at 336-38.

the whole economy, requiring a "more precise" delegation than would otherwise be the case, see A.L.A. Schechter Poultry Corp. v. United States, 295 U.S. 495, 553, 79 L. Ed. 1570, 55 S. Ct. 837 (1935). No "special theories" justifying vague delegation such as the war powers of the President or the sovereign attributes of the delegatee have been or could be asserted. Nor is there some inherent characteristic of the field that bars development of a far more determinate basis for decision. (This is not to deny that there are difficulties; we consider some below.)

EPA cites prior decisions of this Court holding that when there is uncertainty about the health effects of concentrations of a particular pollutant within a particular range, EPA may use its discretion to make the "policy judgment" to set the standards at one point within the relevant range rather than another. NRDC v. EPA, 284 U.S. App. D.C. 136, 902 F.2d 962, 969 (D.C. Cir. 1990); American Petroleum Inst. v. Costle, 214 U.S. App. D.C. 358, 665 F.2d 1176, 1185 (D.C. Cir. 1981); Lead Industries, 647 F.2d at 1161 (D.C. Cir. 1980). We agree. But none of those panels addressed the claim of undue delegation that we face here, and accordingly had no occasion to ask EPA for coherence (for a "principle," to use the classic term) in making its "policy judgment." The latter phrase is not, after all, a self-sufficient justification for every refusal to define limits.

It was suggested at oral argument that EPA's vision of its discretion in application of § 109(b)(1) is no broader than that asserted by OSHA after a remand by this court and upheld by this court in International Union, UAW v. OSHA ("Lockout/Tagout II"), 308 U.S. App. D.C. 368, 37 F.3d 665 (D.C. Cir. 1994). But there, in fact, OSHA allowed itself to set only standards falling somewhere between maximum feasible stringency and some "moderate" departure from that level. 37

F.3d at 669. As our prior discussion should have indicated, here EPA's formulation of its policy judgment leaves it free to pick any point between zero and a hair below the concentrations yielding London's Killer Fog.

The dissent argues that a nondelegation challenge similar to this one was rejected in South Terminal Corp. v. EPA, 504 F.2d 646 (1st Cir. 1974), and cites that case's language that "the rationality of the means can be tested against goals capable of fairly precise definition in the language of science," id. at 677. See Dissent at 2. But the action challenged in South Terminal was EPA's adoption of a plan for ending or preventing violations in Boston of already-established NAAQS, not its promulgation of the NAAQS themselves. Thus, it seems likely that the "means" were the plan's provisions--e.g., a prohibition on most new parking in the city, see 504 F.2d at 671, and the "fairly precisely defined" goals were the NAAQS themselves.

Where (as here) statutory language and an existing agency interpretation involve an unconstitutional delegation of power, but an interpretation without the constitutional weakness is or may be available, our response is not to strike down the statute but to give the agency an opportunity to extract a determinate standard on its own. Lockout/Tagout I, 938 F.2d at 1313. Doing so serves at least two of three basic rationales for the nondelegation doctrine. If the agency develops determinate, binding standards for itself, it is less likely to exercise the delegated authority arbitrarily. See Amalgamated Meat Cutters v. Connally, 337 F. Supp. 737, 758-59 (D.D.C. 1971) (Leventhal, J., for three-judge panel). And such standards enhance the likelihood that meaningful judicial review will prove feasible. See id. at 759. A remand of this sort of course does not serve the third key function of non-delegation doctrine, to "ensure[ ] to the extent consistent with orderly governmental

administration that important choices of social policy are made by Congress, the branch of our Government most responsive to the popular will," Industrial Union Dep't, AFL-CIO v. American Petroleum Inst., 448 U.S. 607, 685, 65 L. Ed. 2d 1010, 100 S. Ct. 2844 (1980) ("Benzene") (Rehnquist, J., concurring). The agency will make the fundamental policy choices. But the remand does ensure that the courts not hold unconstitutional a statute that an agency, with the application of its special expertise, could salvage. In any event, we do not read current Supreme Court cases as applying the strong form of the nondelegation doctrine voiced in Justice Rehnquist's concurrence. See Mistretta v. United States, 488 U.S. 361, 377-79, 102 L. Ed. 2d 714, 109 S. Ct. 647 (1989).

What sorts of "intelligible principles" might EPA adopt? Cost-benefit analysis, mentioned as a possibility in Lockout/Tagout I, 938 F.2d at 1319-21, is not available under decisions of this court. Our cases read § 109(b)(1) as barring EPA from considering any factor other than "health effects relating to pollutants in the air." NRDC, 902 F.2d at 973; see also Lead Industries, 647 F.2d at 1148; American Lung Ass'n v. EPA, 328 U.S. App. D.C. 232, 134 F.3d 388, 389 (D.C. Cir. 1998); American Petroleum Inst., 665 F.2d at 1185 (echoing the same themes).

In theory, EPA could make its criterion the eradication of any hint of direct health risk. This approach is certainly determinate enough, but it appears that it would require the agency to set the permissible levels of both pollutants here at zero. No party here appears to advocate this solution, and EPA appears to show no inclination to adopt it.[4]

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[4]A zero-risk policy might seem to imply de-industrialization, but in fact even that seems inadequate to the task (and even if the calculus is confined to direct risks from

EPA's past behavior suggests some readiness to adopt standards that leave non-zero residual risk. For example, it has employed commonly used clinical criteria to determine what qualifies as an adverse health effect. See Ozone Staff Paper at 59-60 (using American Thoracic Society standards to determine threshold for "adverse health effect" from ozone). On the issue of likelihood, for some purposes it might be appropriate to use standards drawn from other areas of the law, such as the familiar "more probable than not" criterion.

Of course a one-size-fits-all criterion of probability would make little sense. There is no reason why the same probability should govern assessments of a risk of thousands of deaths as against risks of a handful of people suffering momentary shortness of breath. More generally, all the relevant variables seem to range continuously from high to low: the possible effects of pollutants vary from death to trivialities, and the size of the affected population, the probability of an effect, and the associated uncertainty range from "large" numbers of persons with point estimates of high probability, to small

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pollutants, as opposed to risks from the concomitant poverty). First, PM (at least) results from almost all combustion, so only total prohibition of fire or universal application of some heretofore unknown control technology would reduce manmade emissions to zero. See PM Staff Paper at IV-1. Second, the combustion associated with pastoral life appears to be rather deadly. See World Bank, World Development Report 1992: Development and the Environment 52 (1992) (noting that "biomass" fuels (i.e., wood, straw, or dung) are often the only fuels that "poor households, mostly in rural areas" can obtain or afford, and that indoor smoke from biomass burning "contributes to acute respiratory infections that cause an estimated 4 million deaths annually among infants and children.").

numbers and vague ranges of probability. This does not seem insurmountable. Everyday life compels us all to make decisions balancing remote but severe harms against a probability distribution of benefits; people decide whether to proceed with an operation that carries a 1/1000 possibility of death, and (simplifying) a 90% chance of cure and a 10% chance of no effect, and a certainty of some short-term pain and nuisance. To be sure, all that requires is a go/no-go decision, while a serious effort at coherence under § 109(b)(1) would need to be more comprehensive. For example, a range of ailments short of death might need to be assigned weights. Nonetheless, an agency wielding the power over American life possessed by EPA should be capable of developing the rough equivalent of a generic unit of harm that takes into account population affected, severity and probability. Possible building blocks for such a principled structure might be found in the approach Oregon used in devising its health plan for the poor. In determining what conditions would be eligible for treatment under its version of Medicaid, Oregon ranked treatments by the amount of improvement in "Quality Adjusted Life Years" provided by each treatment, divided by the cost of the treatment.[5] Here, of

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[5]The "quality" of various health states was determined by poll, and medical professionals determined the probabilities and durations of various health states with and without the treatment in question.

Oregon was twice forced to revise its system because the United States Department of Health & Human Services determined that the original proposal and a revision violated the Americans with Disabilities Act, 42 U.S.C. §§ 12101-12213. The reason given for this determination was that both versions undervalued the lives of persons with disabilities: The original plan measured quality of life according to the attitudes of the general population rather than the attitudes of persons with

disabilities. See HHS, "Analysis Under the Americans with Disabilities Act ('ADA') of the Oregon Reform Demonstration" (Aug. 3, 1992), reprinted in 9 Issues in L. & Med. 397, 410, 410 (1994). The revised plan ranked treatments leaving the patient in a "symptomatic" state lower than those leaving the patient asymptomatic, and certain disabling conditions were considered "symptoms." See Letter from Timothy B. Flanagan, Assistant Attorney General, to Susan K. Zagame, Acting General Counsel, HHS (Jan. 19, 1993), reprinted in 9 Issues in L. & Med. 397, 418, 421 (1994). The Department's determination was extensively criticized when issued. See Maxwell J. Mehlman et al., "When Do Health Care Decisions Discriminate Against Persons with Disabilities?" 22 J. Of Health Politics, Policy & L. 1385, 1390 (1997) (HHS's "decision provoked a storm of disbelief and denunciation").

We take no position on whether HHS's view was correct, or if the underlying norm also governs EPA's decisions under § 109(b)(1). An affirmative answer, however, would not seem to preclude use of some of Oregon's approach. The first step would be giving appropriate weight to the views of persons with disabilities. The second might be measuring the seriousness of a pollution-induced health effect by the absolute level of well-being that the effect brings about, not by the decrease in level that the effect causes. In other words, if the maximum well-being level is 100 and the average asthmatic whose asthma constitutes a disability has a well-being of 80 in the absence of air pollution (according to a measure that appropriately considers asthmatics' own assessments of their condition), then a response to air pollution that reduces the asthmatics' well-being to 70 could be counted as an effect of magnitude 30 (the difference from full health), rather than 10 (the difference from the level without the pollution). That approach would ensure that effects on persons with disabilities

course, EPA may not consider cost, and indeed may well find a completely different method for securing reasonable coherence. Alternatively, if EPA concludes that there is no principle available, it can so report to the Congress, along with such rationales as it has for the levels it chose, and seek legislation ratifying its choice.

We have discussed only the primary standards. Because the secondary standards are at least in part based on those, see Ozone Final Rule, 62 Fed. Reg. at 38,875/3-76/1; PM Final Rule, 62 Fed. Reg. at 38,680/3, we also remand the cases to the agency with regard to the secondary standards as well, for further consideration in light of this opinion.

II. Other General Claims

The petitioners and amici contend that the EPA erroneously failed to consider a host of factors in revising the PM and ozone NAAQS. We reject each of these claims in turn.

A. Consideration of Cost in Revising Standards

As this court long ago made clear, in setting NAAQS under § 109(b) of the Clean Air Act, the EPA is not permitted to consider the cost of implementing those standards. See Lead Industries, 647 F.2d at 1148 (D.C. Cir. 1980); see also NRDC, 902 F.2d at 973 (following Lead Industries in reviewing particulate matter NAAQS); American Petroleum Inst., 665 F.2d at 1185 (same, in reviewing ozone NAAQS). The petitioners make four unsuccessful attempts to distinguish Lead Industries and its progeny.

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were not underestimated, even in the broad sense of that term apparently adopted by HHS.

First, the petitioners claim that in Lead Industries we held only that the Clean Air Act does not compel the EPA to consider the costs of implementation in setting a NAAQS; on the contrary, we held that the Act precludes the EPA from doing so. See Lead Industries, 647 F.2d at 1148 ("the statute and its legislative history make clear that economic considerations play no part in the promulgation of [NAAQS]").

Second, that we decided Lead Industries prior to the Supreme Court's decision in Chevron U.S.A. Inc. v. NRDC, 467 U.S. 837, 104 S. Ct. 2778, 81 L. Ed. 2d 694 (1984) does not, as the petitioners suggest, require us to revisit the earlier case. The Lead Industries decision was made in Chevron step one terms, see id., as the post-Chevron progeny of Lead Industries have made clear. See NRDC, 902 F.2d at 973 ("Consideration of costs ... would be flatly inconsistent with the statute, legislative history and case law on this point"); NRDC v. EPA, 263 U.S. App. D.C. 166, 824 F.2d 1146, 1158-59 (D.C. Cir. 1987) (in banc) ("Vinyl Chloride") ("Statute on its face does not allow consideration of technological or economic feasibility.... Congress considered the alternatives and chose to close down sources or even industries rather than to allow risks to health").

Third, though the petitioners are correct that in Lead Industries we interpreted § 109(b), which governs the setting of NAAQS, and not § 109(d), which governs the revising of NAAQS, we can discern no legally relevant difference in the two sections that would make Lead Industries inapplicable to § 109(d). Section 109(d)(1) directs the EPA to:

> complete a thorough review of the criteria published under section 7408 of this title and the [NAAQS] promulgated under this section and [to] make such revisions in such criteria and standards and promulgate

> such new standards as may be appropriate in accordance with section 7408 of this title and subsection (b) of this section.

42 U.S.C. § 7409(d)(1). The petitioners contend that consideration of costs is one pertinent factor in determining whether revision of a NAAQS is "appropriate," but this argument ignores the clause immediately following "appropriate," which incorporates § 109(b) and thereby affirmatively precludes consideration of costs in revising NAAQS. Section 108(b), 42 U.S.C. § 7408(b), does require the EPA to provide the States with information on the cost of implementing NAAQS, but the reference to § 108 does not permit consideration of costs in setting NAAQS because it clearly relates back to the requirement that the EPA "make ... revisions in ["the criteria published under section 7408"] ... as may be appropriate." And insofar as the air quality criteria do apply to the setting of NAAQS, they do so through § 109(b), which (again) precludes the consideration of costs and which is explicitly incorporated into § 109(d)(1). See id. § 7409(b)(1) (primary NAAQS to be "based on [the air quality] criteria" issued under § 108).

Fourth, the petitioners point to § 109(d)(2), which creates the CASAC and requires it to advise the EPA about, among other things, "any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of such [NAAQS]." Id. § 7409(d)(2)(C)(iv). Why, ask the petitioners, would the CASAC be required to advise the EPA about these matters if the EPA were not then supposed to consider its advice in the course of revising the NAAQS? As above, however, the petitioners overlook that § 109(d)(1) directs the EPA to review and to revise, as appropriate, the air quality standards issued under § 108 as well as the NAAQS promulgated under §

109(b). The advice required in § 109(d)(2)(C)(iv) is pertinent only to the EPA's duty under § 108 to provide the States with control strategy information.

B. Environmental Consequences of Implementing NAAQS

The State Petitioners argue that the EPA erred in failing "to consider the environmental consequences resulting from the financial impact of the [revised $PM_{2.5}$ and ozone NAAQS] on the federal Abandoned Mine Reclamation Fund Act." This argument is squarely foreclosed by our decision in NRDC. In reviewing the EPA's previous revision of the PM NAAQS, we rejected the argument that the EPA "erred in refusing to consider the health consequences of unemployment in determining the primary [NAAQS] for particulate matter" and held that "it is only health effects relating to pollutants in the air that EPA may consider." 902 F.2d at 972-73 (emphasis in original). Unlike the positive health benefits of ozone that we hold (in Part III.B, below) the EPA must consider, any detrimental health effects resulting from the financial impact upon the mine fund, like the health consequences of unemployment, are traceable to the cost of complying with the revised $PM_{2.5}$ and ozone NAAQS and not to the presence of those pollutants in the air.

C. The National Environmental Policy Act

In challenging both the revised $PM_{2.5}$ and ozone NAAQS, the State Petitioners also argue that the EPA failed to comply with certain requirements of the NEPA. The petitioners recognize that the Congress has exempted all actions under the Clean Air Act, including the setting of NAAQS, from the central requirement of the NEPA, namely, the preparation of an Environmental Impact Statement. Compare 42 U.S.C. § 4332(2)(C)-(D) (agency must prepare EIS in all "major Federal

actions significantly affecting the quality of the human environment"), with 15 U.S.C. § 793(c)(1) ("No action taken under the Clean Air Act shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the [NEPA]"). Nonetheless, they suggest that the EPA is required to complete the functional equivalent of an EIS and also to comply with other requirements in the NEPA, see 42 U.S.C. § 4332(2)(B), (E), (G). State Petitioners' PM Brief at 20; State Petitioners' Ozone Brief at 19. We reject each of these suggestions.

First, the State Petitioners contend that this court has "recognized that the '[CAA], properly construed, requires the functional equivalent of a NEPA impact statement,' " id. (quoting Portland Cement Ass'n v. Ruckelshaus, 158 U.S. App. D.C. 308, 486 F.2d 375, 384 (1973)). Our decision in Portland Cement, however, actually construed only "section 111 of the Clean Air Act." By replacing these words with "[CAA]" in their briefs, the petitioners misrepresent our interpretation of a single section of the Clean Air Act, dealing with emission standards for stationary sources, as an interpretation of the entire Act. Even if the petitioners were correct, however, Portland Cement predated, and is now superseded by, the statutory exemption in 15 U.S.C. § 793(c)(1), which the Congress added in 1974.

Second, the State Petitioners contend that a provision of the NEPA "requires that EPA weigh 'economic considerations.' " The section to which the petitioners refer reads as follows: "all agencies of the Federal Government shall ... identify and develop methods and procedures ... which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations." 42 U.S.C. § 4332(2)(B). Even if this section is properly read generally to require an agency to consider implementation costs, § 109(d)(1)

specifically prohibits the EPA from doing so. And the NEPA provides that it shall not "in any way affect the specific statutory obligations of any Federal agency ... to comply with criteria or standards of environmental quality." 42 U.S.C. § 4334(1). Therefore, § 4332(2)(B) cannot require the EPA to disregard the prohibition in § 109(d)(1) upon the consideration of costs in setting NAAQS.

The State Petitioners' remaining arguments--that the EPA failed to comply with two other sections of the NEPA--fare little better. Section 4332(2)(E) requires federal agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." As with § 4332(2)(B), insofar as § 4332(2)(E) can be read to require the EPA to consider the costs of implementing NAAQS when revising those standards, contrary to the prohibition in § 109(d)(1), § 4334(1) prevents it from having any effect.

If, on the other hand, § 4332(2)(E) is understood in the context of the Clean Air Act to require the EPA merely to discuss implementation alternatives, then it, like the similar § 4332(2)(G) with which the petitioners also claim the EPA failed to comply, is the functional equivalent of § 108(b)(1). That section requires the EPA to provide the States with, among other things, "such data as are available on available technology and alternative methods of prevention and control of air pollution." As we recognize with regard to the requirement that the agency prepare an EIS, "compliance with NEPA's ... requirements has not been considered necessary when the agency's organic legislation mandates procedures for considering the environment that are 'functional equivalents' of the [NEPA's] process." Izaak Walton League of Am. v. Marsh, 210 U.S. App. D.C. 233, 655 F.2d 346, 367 n.51 (1981). The

rationale for the functional equivalence doctrine is the well-established principle that a "general statutory rule usually does not govern unless there is no more specific rule." Green v. Bock Laundry Mach. Co., 490 U.S. 504, 524, 104 L. Ed. 2d 557, 109 S. Ct. 1981 (1989); see also Alabama ex rel. Siegelman v. EPA, 911 F.2d 499, 504-05 (11th Cir. 1990) (citing cases). The NEPA is the general statute requiring agencies to consider environmental harms, whereas the Clean Air Act is the more specific and its equivalent provisions apply in place of those in the NEPA. See Portland Cement, 486 F.2d at 386 (finding functional equivalence when more specific statute strikes "workable balance between some of the advantages and disadvantages of full application of NEPA").

Our analysis of the petitioners' contentions leads us to conclude that nothing in the NEPA requires the EPA in setting NAAQS to consider or to discuss matters that the Clean Air Act does not already permit or require.

D. The Unfunded Mandates Reform Act

The State Petitioners in the particulate matter case and Congressman Bliley in the ozone case both contend that the EPA is required by the Unfunded Mandates Reform Act, 2 U.S.C. § 1501 et seq., to prepare a Regulatory Impact Statement (RIS) when setting a NAAQS, see id. § 1532, and to choose the least burdensome from a range of alternative permissible NAAQS, see id. § 1535. Even if the petitioners and the amicus are correct regarding the interaction of the UMRA and the CAA--a point the EPA strongly contests-we can provide them with no relief. See id. § 1571(a)(3) ("The inadequacy or failure to prepare [a RIS] ... shall not be used as a basis for staying, enjoining, invalidating or otherwise affecting [an] agency rule"); id. § 1571(b) ("Except as provided in [§ 1571(a), which does not mention § 1535,] ... any compliance or noncompliance

with the provisions of this chapter ... shall not be subject to judicial review; and no provision of this chapter shall be construed to [be] ... enforceable by any person in any ... judicial action").

The State Petitioners, recognizing the limitations upon judicial review in § 1571, contend that the EPA's failure to prepare a RIS can nonetheless render the NAAQS arbitrary and capricious, see 42 U.S.C. § 7607(d)(9), relying upon Thompson v. Clark, 239 U.S. App. D.C. 179, 741 F.2d 401 (D.C. Cir. 1984). In that case, we interpreted a statute that, like the UMRA, both specified that the RIS be included in the record for judicial review and precluded judicial review of an agency's compliance with the RIS requirement. We held that a "reviewing court will consider the contents of the [RIS], along with the rest of the record, in assessing not the agency's compliance with the [requirement to prepare the RIS], but the validity of the rule under other provisions of law." 741 F.2d at 405. No information in a RIS, however, could lead us to conclude that the EPA improperly set the PM and ozone NAAQS; the only information such a statement would add to the rulemaking record for a NAAQS would pertain to the costs of implementation, see 2 U.S.C. § 1532(a), and the EPA is precluded from considering those costs in setting a NAAQS. Accordingly, the failure to prepare a RIS does not render the NAAQS arbitrary and capricious.

E. The Regulatory Flexibility Act

In both the ozone and particulate matter cases, the Small Business Petitioners argue that the EPA improperly certified that the revised NAAQS would not have a significant impact upon a substantial number of small entities. The Regulatory Flexibility Act, 5 U.S.C. § 601 et seq., as amended in 1996 by the Small Business Regulatory Enforcement Fairness Act, Pub.

L. No. 104-121, tit. II, 110 Stat. 857-74 ("SBREFA"), requires an agency, when engaging in notice and comment rulemaking, to "prepare and make available for public comment an initial regulatory flexibility analysis.... [that] describes the impact of the proposed rule on small entities," 5 U.S.C. § 603(a), including small businesses, small organizations, and small governmental jurisdictions, see id. § 601(6). When promulgating a final rule, an agency must describe "the steps ... taken to minimize the significant economic impact on small entities." Id. § 604(a)(5). According to the petitioners, if the EPA had complied with the RFA, it would likely have promulgated less stringent PM and ozone NAAQS than those actually chosen, which would have reduced the burden upon small entities.

A regulatory flexibility analysis is not required, however, if the agency "certifies that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." Id. § 605(b). Further, the SBREFA made no change in the requirement that a regulatory flexibility analysis conducted pursuant to the RFA include estimates of "the number of small entities to which the proposed rule will apply" and of "the classes of small entities which will be subject to the requirement." 5 U.S.C. § 603(b)(3)-(4). We have consistently interpreted the RFA, based upon these sections, to impose no obligation upon an agency "to conduct a small entity impact analysis of effects on entities which it does not regulate." Motor & Equip. Mfrs. Ass'n v. Nichols, 330 U.S. App. D.C. 1, 142 F.3d 449, 467 & n.18 (1998).

The EPA certified that its revised NAAQS will "not have a significant economic impact on small entities within the meaning of the RFA." PM Final Rule, 62 Fed. Reg. at 38,702/2; Ozone Final Rule, 62 Fed. Reg. at 38,887/2-3. According to the

EPA, the NAAQS themselves impose no regulations upon small entities. Instead, the several States regulate small entities through the state implementation plans (SIPs) that they are required by the Clean Air Act to develop. See 42 U.S.C. § 7410. Because the NAAQS therefore regulate small entities only indirectly--that is, insofar as they affect the planning decisions of the States--the EPA concluded that small entities are not "subject to the proposed regulation." See Mid-Tex Elec. Coop., Inc. v. FERC, 249 U.S. App. D.C. 64, 773 F.2d 327, 342 (D.C. Cir. 1985); see also 773 F.2d at 343 ("Congress did not intend to require that every agency consider every indirect effect that any regulation might have on small businesses in any stratum of the national economy.").

The EPA's description of the relationship between NAAQS, SIPs, and small entities strikes us as incontestable. The States have broad discretion in determining the manner in which they will achieve compliance with the NAAQS. The EPA "is required to approve a state plan which provides for the timely attainment and subsequent maintenance of ambient air standards" and cannot reject a SIP based upon its view of "the wisdom of a State's choices of emission limitations," Train v. NRDC, 421 U.S. 60, 79, 95 S. Ct. 1470, 43 L. Ed. 2d 731 (1975) (emphasis in original), or of the technological infeasibility of the plan. See Union Elec. Co. v. EPA, 427 U.S. 246, 265, 49 L. Ed. 2d 474, 96 S. Ct. 2518 (1976). Therefore, a State may, if it chooses, avoid imposing upon small entities any of the burdens of complying with a revised NAAQS. Only if a State does not submit a SIP that complies with § 110, 42 U.S.C. § 7410, must the EPA adopt an implementation plan of its own, which would require the EPA to decide what burdens small entities should bear. The agency has stated, however, that it will do a regulatory flexibility analysis before adopting an implementation plan of its own, as it did in 1994 when proposing such a plan for Los Angeles. See Ozone Final Rule,

62 Fed. Reg. at 38,891/1; PM Final Rule, 62 Fed. Reg. at 38,705/3.

The responses of the Small Business Petitioners do not persuade us to reject the EPA's argument or to deviate from our holdings in Mid-Tex and its progeny. First, the Small Business Petitioners contend that we must defer to the Small Business Administration's interpretation of the Act, as expressed in a letter to the EPA from the SBA's Chief Counsel for Advocacy, that the NAAQS do impose requirements upon small entities. The SBA, however, neither administers nor has any policymaking role under the RFA; at most its role is advisory. See, e.g., 5 U.S.C. §§ 601(3), 602(b), 603(a), 605(b), 609(b)(1), 612. Therefore, we do not defer to the SBA's interpretation of the RFA. See Scheduled Airlines Traffic Offices, Inc. v. Department of Defense, 318 U.S. App. D.C. 347, 87 F.3d 1356, 1361 (D.C. Cir. 1996) (no Chevron deference owed to agency interpretation of statute it does not administer). Nor do we defer to the EPA's interpretation of the RFA, for it does not administer the Act either. We do, however, find the EPA's interpretation of the statute persuasive.

Second, the Small Business Petitioners argue that the EPA cannot claim both that the NAAQS will have no effect upon small entities and that it will have positive health effects. Clearly, however, the EPA can maintain that the NAAQS will have health effects because the Clean Air Act empowers the agency to ensure that such benefits accrue; and it can maintain that the NAAQS will not directly affect small entities because it has no authority (short of imposing its own implementation plan upon a non-complying state) to impose any burdens upon such entities.

Third, the Small Business Petitioners attempt to distinguish the possible effects upon small entities in this case

from the indirect effects that, as we found in Mid-Tex, are not within the contemplation of the RFA. But Mid-Tex is not so easily distinguished. The petitioners in that case argued that the RFA required the FERC to consider economic effects not only upon regulated industries but also upon the small entities that are their wholesale customers, even though the customers were not directly regulated by the FERC. We rejected that argument, finding a "clear indication" in the language of § 603 that the RFA is "limited to small entities subject to the proposed regulation." Mid-Tex, 773 F.2d at 342; see also Motor & Equip. Mfrs. Ass'n, 142 F.3d at 467 n.18 ("The RFA itself distinguishes between small entities subject to an agency rule, to which its requirements apply, and those not subject to the rule, to which the requirements do not apply."); United Distribution Cos. v. FERC, 88 F.3d 1105, 1170 (1996) (regulatory flexibility analysis provision applies only to "small entities that are subject to the requirements of the rule") (emphasis in original). That the Clean Air Act requires the States to submit SIPs that will achieve compliance with the NAAQS does not, in view of the States' nearly complete discretion to determine which entities will bear the burdens of a revised NAAQS, make such small entities as the SIPs may regulate any more subject to the EPA's regulation than were the wholesalers in Mid-Tex subject to regulation by the FERC.

Finally, the Small Business Petitioners suggest that the Congress in enacting the SBREFA overruled our prior interpretation of the RFA in Mid-Tex and its progeny. The SBREFA made a number of changes in the RFA, but it did not change anything in § 603 upon which we relied in Mid- Tex. And although the Congress made a slight modification in § 605(b), we do not understand it to alter our analysis in Mid-Tex. Prior to 1996, § 605(b) required an agency to provide "a succinct statement explaining the reasons" for its certification that the promulgated rule would not have a

significant economic impact upon small entities. That section now requires "a statement providing the factual basis for such certification." Our decision in Mid-Tex contemplates that an agency may justify its certification under the RFA upon the "factual basis" that the rule does not directly regulate any small entities. Nothing in the change to § 605(b) suggests that basis for certification is no longer permissible. (Indeed, the section of the statute amending § 605(b) is labeled "Technical and Conforming Amendments," see SBREFA § 243, 110 Stat. at 866.) We therefore conclude that the EPA properly certified that its NAAQS would not have a significant impact upon a substantial number of small entities.

III. Ozone

A. Subpart 2 and the Revised Ozone Standard

In 1990 the Congress substantially revised the Clean Air Act by, among other things, adding specific enforcement provisions for carbon monoxide, particulate matter, sulfur oxides, nitrogen dioxide, lead, and as pertinent here, ozone. Previously, the Act required that all areas of the country not attaining the primary ozone standard, no matter how far from attainment, come into compliance "as expeditiously as practicable but not later than December 31, 1987." 42 U.S.C. § 7502 (1988). Many areas had not attained the primary ozone NAAQS by that date; some were still a long way from doing so. The Congress responded to the continued ozone problem by enacting a new enforcement scheme, which it codified as Subpart 2 of Part D of the Clean Air Act, 42 U.S.C. §§ 7511-7511f, redesignating the original provisions as Subpart 1.

Subpart 2 requires the EPA to classify nonattainment areas based upon their design value, which is a rough measure of whether an area complies with the 0.12 ppm, 1-hour primary

ozone standard.[6] A table in Subpart 2, set out here in the margin,[7] establishes classifications ranging from marginal to

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[6]More specifically, the design value is the fourth-highest daily maximum ozone concentration in an area over three consecutive years for which there are sufficient data. If that value is less than or equal to 0.12 ppm, then an area will have only three expected values above that level and it will be in attainment with the ozone NAAQS. See EPA, The Clean Air Act Ozone Design Value Study: Final Report 1-1 to 1-22 (1994) (filed pursuant to 42 U.S.C. § 7511b(g), which required the EPA to conduct "a study of whether the [existing design value] methodology ... provides a reasonable indicator of the ozone air quality of ozone nonattainment areas"; the EPA concluded it did).

[7]This table appears in Clean Air Act § 181(a)(1), 42 U.S.C. § 7511(a)(1):

TABLE 1

Area Class	Design Value [ppm]	Primary Standard Attainment Date
Marginal	0.121 up to 0.138	3 years after November 15, 1990
Moderate	0.138 up to 0.160	6 years after November 15, 1990
Serious	0.160 up to 0.180	9 years after November 15, 1990
Severe	0.180 up to 0.280	15 years after November 15, 1990
Extreme	0.280 and above	20 years after November 15, 1990

The Severe Area category is later subdivided, creating a sixth classification for ozone nonattainment areas. See id. § 7511(a)(2) ("Notwithstanding table 1, [for] a severe area with a 1988 ozone design value between 0.190 and 0.280 ppm, the

extreme, and provides an attainment date for each class. See id. § 7511(a)(1)-(2). Subpart 2 also specifies, for each class of nonattainment areas, both measures that the States must take to reduce emissions of the chemicals that are precursors of ozone and information that the States must report to the EPA. See id. § 7511a. In short, Subpart 2 is the Congress's comprehensive plan for reducing ozone levels throughout the country.

The State and Non-State Petitioners, along with Congressman Bliley appearing as an amicus curiae, argue that Subpart 2 precludes the EPA from revising the primary and secondary ozone NAAQS. We reject this argument (in Part III.A.1) insofar as it pertains to the EPA's continued ability to promulgate a revised ozone NAAQS or to designate areas as not in attainment with a revised NAAQS. We agree (in Part III.A.2) with those petitioners, however, insofar as they maintain, based upon the text and structure of Subparts 1 and 2, that the EPA is precluded from enforcing a revised primary ozone NAAQS other than in accordance with the classifications, attainment dates, and control measures set out in Subpart 2. Further, we conclude (in Part III.A.3) that the EPA may not require a State to comply with a revised secondary ozone NAAQS in any area that has yet to attain the 0.12 ppm primary standard.

1. The EPA's Power to Revise the Ozone NAAQS and Designate Areas as Nonattainment

The 1990 amendments did not alter the section of the Clean Air Act that provides for setting and revising primary and secondary NAAQS. See 42 U.S.C. § 7409. The Administrator, therefore, still must "at five-year intervals [from December 31, 1980] ... complete a thorough review of ... the [NAAQS]

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attainment date shall be 17 years ... after November 15, 1990").

promulgated under this section and ... make such revisions in such ... standards ... as may be appropriate." Id. § 7409(d)(1). The Second Circuit held that this section continues to "set[ ] forth a bright-line rule for agency action," American Lung Ass'n v. Reilly, 962 F.2d 258, 263 (1992), and we agree. Nothing in the Act modifies this "bright-line rule" or otherwise makes it inapplicable to revision of the ozone NAAQS.

To the extent that the 1990 amendments shed any light upon this question, they suggest that the EPA retains its authority to revise the ozone NAAQS. For example, if the EPA relaxes a NAAQS after enactment of the 1990 amendments, then "the Administrator shall ... promulgate requirements applicable to all areas which have not attained that [relaxed] standard as of the date of such relaxation.... [which] shall provide for controls ... not less stringent than the controls applicable to areas designated nonattainment before such relaxation." 42 U.S.C. § 7502(e). Although two other subsections of § 172 are expressly made inapplicable to the ozone regulations in Subpart 2, see id. § 7502(a)(1)(C), (a)(2)(D), this so-called anti-backsliding provision contains no such exemption. Accordingly, as the EPA notes, this section specifically contemplates that the agency may relax its ozone NAAQS and, therefore, necessarily implies that it retains the authority to revise that NAAQS. Tellingly, neither the petitioners nor the amicus reply to this point.

The petitioners and amicus raise two other arguments to support their position that the EPA cannot alter the ozone NAAQS without the approval of the Congress. We reject both in short order.

First, the Non-State Petitioners contend that Subpart 2 renders revision of the ozone NAAQS "inappropriate" within the meaning of § 109(d)(1), which provides the EPA shall

"make such revisions in such ... standards ... as may be appropriate." 42 U.S.C. § 7409(d)(1). This argument, however, pointedly ignores the text immediately following the word "appropriate," which specifies that appropriateness is to be determined "in accordance with section 7408 ... and [§ 7409(b)]" (and which, as we read it, means exclusively in accord with those sections). See, e.g., American Methyl Corp. v. EPA, 242 U.S. App. D.C. 148, 749 F.2d 826, 835-36 (D.C. Cir. 1984). Because Subpart 2 is neither listed in § 109(d)(1) nor incorporated by reference in either § 108, id. § 7408, or § 109(b), it cannot render revision of the ozone NAAQS inappropriate.

Second, the State Petitioners and Congressman Bliley argue, based upon the classification table in § 181(a)(1), id. § 7511(a)(1), that Subpart 2 codified the 0.12 ppm ozone NAAQS and, therefore, only the Congress can promulgate a revised NAAQS. Yet not all areas designated nonattainment for ozone will have design values of 0.121 ppm or higher. In fact, this was true of areas designated nonattainment for ozone as a result of the 1990 amendments, see Ozone Final Rule, 62 Fed. Reg. at 38,884/3, at least in part because of the stringent criteria in the Clean Air Act for changing the designation of an area to attainment from nonattainment. See 42 U.S.C. 7407(d)(3)(E)(iii) (redesignation permissible only if area's attainment of NAAQS "is due to permanent and enforceable reductions in emissions"). In short, although the numbers in the classification table are based upon the 0.12 ppm ozone NAAQS, they are neither equivalent to nor a codification of the NAAQS.

Not only does the EPA, as we conclude above, retain authority to promulgate a revised ozone NAAQS; the agency is still required, "in no case later than 2 years from the date of promulgation" of a revised NAAQS, to designate areas as

attainment, nonattainment, or unclassifiable under that NAAQS. Id. § 7407(d)(1)(B). Although the 1990 amendments extended by roughly 18 months the maximum time between promulgation of a revised NAAQS and designation of nonattainment areas under that NAAQS, see 42 U.S.C. § 7407(d)(1)-(2) (1988), they made no substantive change in the EPA's authority to designate areas as nonattainment under a revised NAAQS. Therefore, we hold that the EPA retains the power to designate areas as nonattainment under a revised ozone NAAQS.

2. The EPA's Power to Enforce the Revised Ozone Standard

That the enactment of Subpart 2 does not alter the EPA's authority to revise the ozone NAAQS or to designate areas as nonattainment for ozone does not, however, compel the conclusion that Subpart 2 has no effect upon the EPA's authority to enforce a revised primary ozone NAAQS. (We consider the enforcement of secondary ozone NAAQS in Part III.A.3, below.) In fact, the text and structure of Subparts 1 and 2 suggest precisely the opposite conclusion. After designating an area as nonattainment under a NAAQS, the EPA normally looks to Subpart 1 for authority to "classify the area for the purpose of applying an attainment date." 42 U.S.C. § 7502(a)(1)-(2). The cited provisions, however, do not apply "with respect to nonattainment areas for which classifications [and attainment dates] are specifically provided under other provisions of [Part D of Subchapter 1 of the Clean Air Act]." Id. § 7502(a)(1)(C), (a)(2)(D).

The EPA argues that Subpart 2 specifically provides classifications and attainment dates only for nonattainment designations under the 0.12 ppm ozone NAAQS. The State and Non-State Petitioners counter that Subpart 2 specifically

provides classifications and dates for all areas designated nonattainment under any ozone NAAQS. We agree with the petitioners.

> The pertinent provision of Subpart 2 reads as follows:
>
> (a) Classification and attainment dates for 1989 nonattainment areas. -- (1) Each area designated nonattainment for ozone pursuant to section 7407(d) of this title shall be classified at the time of such designation, under table 1, by operation of law, as a Marginal Area, a Moderate Area, a Serious Area, a Severe Area, or an Extreme Area....

Id. § 7511(a)(1). As the petitioners note, § 107(d), 42 U.S.C. § 7407(d), specifies three different times at which an area can be designated "nonattainment for ozone": immediately following enactment of the 1990 amendments, id. § 7407(d)(4); after the EPA revises the ozone NAAQS, id. § 7407(d)(1); and when an area that was in attainment, either when the Congress enacted the 1990 amendments or when the EPA promulgated a revised ozone NAAQS, later ceases to comply, id. § 7407(d)(3). The petitioners conclude from the general reference to § 107(d) that the classifications and attainment dates in Subpart 2 apply to areas designated under §§ 107(d)(1), (3), and (4). The EPA gamely responds that the reference to § 107(d) includes only subsection (4), but we do not defer to the agency's interpretation because we find that the Congress has spoken on the "precise question at issue" and we "must give effect to the unambiguously expressed intent of Congress." Chevron U. S. A. Inc., 467 U.S. 837, 842-43 & n.9, 104 S. Ct. 2778, 81 L. Ed. 2d 694 (1984). We canvass the two reasons that lead us to this conclusion before returning to the EPA's argument.

First, the reference to § 107(d) in § 181(a)(1) appears to have been purposeful and not the drafting error that the EPA's interpretation implies. The Congress considered but did not adopt bills that clearly would have limited the reach of Subpart 2 to nonattainment designations made immediately following enactment of the 1990 amendments. The Senate bill contained a version of Subpart 2 that classified only those areas designated nonattainment for ozone under its equivalent of § 107(d)(4). See S. 1630, 101st Cong. §§ 101, 107, reprinted in III Legislative History of the Clean Air Act Amendments of 1990, at 4124-25, 4195 [hereinafter 1990 Legislative History]. The version of Subpart 2 in the House bill, as originally introduced, similarly referred only to designations made under its equivalent of § 107(d)(4). See H.R. 3030, 101st Cong. §§ 101(a), 103, reprinted in II 1990 Legislative History, at 3748-49, 3795-96. The House committee, however, replaced the specific reference to what is now § 107(d)(4) with a general reference to § 107(d). See H.R. Rep. No. 101-490, at 3-6, 17 (1990), reprinted in II 1990 Legislative History, at 3027-30, 3041. The Conference committee then reported the text of the House bill rather than that of the Senate. See H.R. Rep. No. 101-952, at 335 (1990), reprinted in I 1990 Legislative History, at 1785.

Second, our conclusion that the Congress intentionally referred to § 107(d) as a whole is supported by a comparison of Subparts 1 and 2. The Congress enacted Subpart 2 because of the failure of the controls in Subpart 1 to bring areas into attainment with the 0.12 ppm standard in the allotted time. See H.R. Rep. No. 101-490, at 145-50, reprinted in II 1990 Legislative History, at 3169-74. Rather than continue treating all ozone nonattainment areas alike, the Congress allowed the various areas between 3 and 20 years to attain the ozone NAAQS, depending upon the extent of the area's ozone problem. See id. at 146-47 ("In 1977, Congress tried to waive

[sic] a 'magic wand' and command that all nonattainment areas [for ozone] will meet the applicable [NAAQS].... by December 31, 1987. ... [That] date[ ] has come and gone and it is clear that ... we had no 'magic' solutions."), reprinted in II 1990 Legislative History, at 3170-71. As the petitioners argue, because the 1990 amendments extended the time for nonattainment areas to comply with the 0.12 ppm ozone NAAQS, they must preclude the EPA from requiring areas to comply either more quickly or with a more stringent ozone NAAQS.

Subpart 1 requires compliance with a primary NAAQS "as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment." 42 U.S.C. § 7502(a)(2)(A). All nonattainment areas would have until 2012 to comply with the revised ozone NAAQS if the EPA and the States were to take the full time authorized in Subpart 1 for making attainment designations and the EPA were to approve every possible extension for each area. See id. §§ 7407(d)(1)(A)-(B), 7502(a)(2)(A), (C). Such wide discretion is inconsistent, however, with Subpart 2, in which the Congress stripped the EPA of discretion to decide which ozone nonattainment areas should receive more time to reach attainment (with two limited exceptions not relevant here, see id. § 7511(a)(4), (5)). Moreover, under § 181(a) of Subpart 2, Los Angeles, the nation's only Extreme Area, has until 2010 to attain the 0.12 ppm ozone NAAQS, and the possibility of extending that deadline until 2012. That Los Angeles should also have to attain a more stringent ozone standard by that same year, if not earlier, clearly runs counter to the comprehensive enforcement scheme enacted in Subpart 2.

The EPA offers two arguments against this interpretation of Subparts 1 and 2. First, the EPA contends that a recent statute confirms its power to designate nonattainment

areas under the revised ozone standard. See Pub. L. No. 105-178, § 6103(a), 112 Stat. 465 (1998) (extending time to two years from one year for governor to submit proposed designation under 0.08 ppm ozone NAAQS). That statute also specifically states, however, that "nothing in section[ ] ... 6103 shall be construed by the Administrator of Environmental Protection Agency or any court ... to affect any pending litigation or to be a ratification of the ozone ... standard[ ]." Id. § 6104. Further, even if the EPA were correct that § 6103 confirms the agency's power to designate areas under a revised ozone NAAQS, that power was never in doubt, as we concluded above. Indeed, § 6104 simply does not bear upon the question we address here: whether Subpart 1 or Subpart 2 provides the applicable enforcement mechanisms for an area designated nonattainment under a revised ozone NAAQS.

Second, the EPA argues that read in context the reference to § 107(d) in § 181(a)(1) relates only to designations made under § 107(d)(4). Because the table in § 181(a)(1) classifies areas based upon a design value that roughly measures attainment of the 0.12 ppm ozone NAAQS, the EPA contends that the nonattainment designations referenced in § 181(a)(1) are only those designations made under the 0.12 ppm ozone NAAQS. This explanation, however, does not square with either the Congress's decision not to refer to § 107(d)(4) specifically or the long-term nature of the attainment scheme enacted in Subpart 2; on the EPA's interpretation, that scheme would have been stillborn had the EPA revised the ozone NAAQS immediately after the Congress enacted the 1990 amendments.

The EPA points next to § 181(b)(1), which specifies the attainment dates for areas that met the 0.12 ppm standard when the Congress enacted the 1990 amendments but that later cease to comply. That section, however, applies only to areas

designated under § 107(d)(3) that previously were "designated attainment or unclassifiable for ozone under section [107(d)(4)]." That § 181(b)(1) provides special rules for such areas, but not for areas designated under § 107(d)(3) that had previously been designated attainment for ozone or unclassifiable under § 107(d)(1), does not support the EPA's argument that the phrase in § 181(a)(1) "designated nonattainment for ozone pursuant to section 107(d)" denotes only those designations made under § 107(d)(4). If anything, the specification of § 107(d)(4) in § 181(b)(1) makes its absence from § 181(a)(1) all the more striking.

The final bit of context to which the EPA points is the title of § 181(a): "Classification and attainment dates for 1989 nonattainment areas." Because the title specifies "1989 nonattainment areas," we are told, § 181(a) must refer only to nonattainment designations made immediately after enactment of the 1990 amendments, that is, designations made under § 107(d)(4). Although "the title of a statute or section can aid in resolving an ambiguity in the legislation's text," INS v. National Ctr. for Immigrants' Rights, Inc., 502 U.S. 183, 189, 116 L. Ed. 2d 546, 112 S. Ct. 551 (1991), a title cannot be allowed to create an ambiguity in the first place. See Maguire v. Commissioner of Internal Revenue, 313 U.S. 1, 9, 61 S. Ct. 789, 85 L. Ed. 1149 (1941) ("The title of an act will not limit the plain meaning of the text."). The text of § 181(a) clearly encompasses nonattainment designations made under all subsections of § 107(d). There simply is no ambiguity in need of resolution by reference to the title of the section.

In sum, § 181(a) "specifically provides" for classifications and attainment dates for areas designated nonattainment for ozone pursuant to § 107(d)(1). Accordingly, Subpart 2, not Subpart 1, provides the classifications and attainment dates for any areas designated nonattainment under

a revised primary ozone NAAQS, see 42 U.S.C. § 7502(a)(1)(C), (a)(2)(D), and the EPA must enforce any revised primary ozone NAAQS under Subpart 2.

3. The Secondary Ozone NAAQS

The Non-State Petitioners briefly contend that our conclusion that Subpart 2 provides the classifications and attainment dates for areas designated nonattainment under a revised primary ozone NAAQS is equally applicable to the enforcement of a revised secondary ozone NAAQS. We find it impossible to conclude, however, that Subpart 2 "specifically provides" for classifications and attainment dates for areas designated nonattainment with a revised secondary ozone NAAQS; § 181(a)(1) expressly refers only to primary NAAQS and Subpart 2 not once mentions secondary NAAQS. Further, attainment dates in Subpart 1 for secondary standards are less stringent than for primary standards, making comparison with the more lenient dates in Subpart 2 less troubling. Compare id. § 7502(a)(2)(B) (attainment of secondary NAAQS "shall be ... achieved as expeditiously as practicable after the date such area was designated nonattainment"), with id. § 7502(a)(2)(A) (attainment of primary NAAQS "shall be ... achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment"). Nonetheless, we understand Subpart 2 to codify the Congress's judgment as to what is "as expeditiously as practicable" in reducing an area's level of ozone. Consequently, the EPA is precluded from requiring any steps toward compliance with a revised secondary ozone NAAQS prior to an area's attainment of the 0.12 ppm standard. In areas that meet the 0.12 ppm standard, however, Subpart 2 erects no bar to the EPA's requiring compliance with a revised secondary ozone NAAQS "as expeditiously as practicable."

B. Ozone's Health Benefits

Petitioners presented evidence that according to them shows the health benefits of tropospheric ozone as a shield from the harmful effects of the sun's ultraviolet rays--including cataracts and both melanoma and nonmelanoma skin cancers. In estimating the effects of ozone concentrations, EPA explicitly disregarded these alleged benefits.

EPA explained its decision first as a matter of statutory interpretation. Under the Clean Air Act, EPA's ambient standards for any pollutant are to be "based on [the] criteria" that EPA has published for that pollutant. 42 U.S.C. § 7409(b)(1) & (2). The "criteria," in turn, are to "reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities." Id. § 7408(a)(2). The reference to "all identifiable effects" would seem on its face to include beneficent effects.

EPA attempts to avoid this straightforward reading in several ways. First, it points to the term "such pollutant," arguing that the statute requires it to focus exclusively on the characteristics that make the substance a "pollutant." But the phrase "pollutant" is simply a label used to identify a substance to be listed and controlled by the statute. While it is perfectly true that a substance known to be utterly without adverse effects could not make it onto the list, this fact of nomenclature does not visibly manifest a congressional intent to banish consideration of whole classes of "identifiable effects."

EPA also relies on the fact that two of the three specified considerations under § 108(a)(2)'s general mandate refer to "adverse effects":

> The criteria for an air pollutant, to the extent practicable, shall include information on-- (A) those variable factors (including atmospheric conditions) which of themselves or in combination with other factors may alter the effects on public health or welfare of such air pollutant; (B) the types of air pollutants which, when present in the atmosphere, may interact with such pollutant to produce an adverse effect on public health or welfare; and (C) any known or anticipated adverse effects on welfare. Id. § 7408(a)(2) (emphasis added).

EPA's argument would be of uncertain force even if all three types of effects specifically required to be considered were spoken of as "adverse effects"; there is no reason to read "adverse" back into the "all identifiable effects" of § 108(a)(2). But as one of the three specified classes refers to "effects" unmodified, id. § 7408(a)(2)(A), we can reject EPA's argument without even reaching that issue. That Congress qualified "effects" in clauses (B) and (C) with "adverse" seems only to strengthen the supposition that in (A)--and in the general mandate--it intended to cover all health or welfare effects. Therefore if petitioners' contentions are right, clause (A) applies to ozone: the presence of ultraviolet radiation at various levels "alters the effects [of ozone] on public health or welfare" by making them on the whole less malign--perhaps even beneficial.

EPA next argues that Title VI of the Clean Air Act, id. §§ 7671-7671q, which mandates certain measures to preserve stratospheric ozone, represents a complete consideration of ozone's beneficial role as a UV shield. Petitioners' claim, however, is that ground-level (tropospheric) ozone--the subject of this rule--has a UV-screening function independent of the

ozone higher in the atmosphere. EPA points to nothing in the statute that purports to address tropospheric ozone.

Finally, EPA directs us towards legislative history from the 1970 and 1990 Clean Air Act Amendments. The "all identifiable effects" language, however, dates to the 1967 Amendments. Legislative history from the 1970 and 1990 Congresses cannot be "an authoritative interpretation of what the [1967] statute meant," because it is "the function of the courts and not the Legislature, much less a Committee of one House of the Legislature, to say what an enacted statute means." Pierce v. Underwood, 487 U.S. 552, 566, 101 L. Ed. 2d 490, 108 S. Ct. 2541 (1988).

Under Chevron, we defer to an agency's interpretation of a statute if "the statute is silent or ambiguous with respect to the specific issue" and "the agency's answer is based on a permissible construction of the statute." 467 U.S. at 843. We find no such ambiguity in this case. Further, EPA's interpretation fails even the reasonableness standard of Chevron's second part: it seems bizarre that a statute intended to improve human health would, as EPA claimed at argument, lock the agency into looking at only one half of a substance's health effects in determining the maximum level for that substance. At oral argument even EPA counsel seemed reluctant to claim that the statute justified disregard of the beneficent effects of a pollutant bearing directly on the health symptoms that accounted for its being thought a pollutant at all (suppose, for example, a chemical that both impedes and enhances breathing, depending on the person or circumstances); he also seemed unable to distinguish that case from the one here--where the chemical evidently impedes breathing but provides defense against various cancers.

Legally, then, EPA must consider positive identifiable effects of a pollutant's presence in the ambient air in formulating air quality criteria under § 108 and NAAQS under § 109. EPA's other arguments are technical, and are of two sorts: those that allegedly show petitioners' studies to be fatally flawed and those that allegedly show specific inflation of results in these studies. We need only consider the first sort, for EPA chose to give the studies no weight at all.

Petitioners rely primarily on studies by Lutter and Cupitt. EPA found that these could be ignored because the marginal benefits are difficult, if not impossible, to quantify reliably and because there is "no convincing basis for concluding that any such effects ... would be significant." But these are not the criteria by which EPA assesses adverse health effects. It does not rigorously or uniformly demand either quantifiability, see, e.g., Ozone Final Rule, 62 Fed. Reg. at 38,860/3 (admitting that "quantitative risk estimates could not be developed" for certain adverse effects of ozone on which EPA regulated); EPA Ozone Brief at 48 (defending consideration of various effects that "played an important role in the Administrator's final decision" despite absence of quantification: "EPA did not estimate the risk for such effects because 'information [was] too limited to develop quantitative estimates,'--not because there is doubt the effects occur.") (alteration and emphasis in original) (citation omitted), or any specific level of significance. As we can see no reason for imposing a higher information threshold for beneficent effects than for maleficent ones, we have no basis for affirming EPA's decision to disregard the studies.

As we said above, we are remanding to EPA to formulate adequate decision criteria for its ordinary object of analysis-ill effects. We leave it to the agency on remand to determine whether, using the same approach as it does for

those, tropospheric ozone has a beneficent effect, and if so, then to assess ozone's net adverse health effect by whatever criteria it adopts.

IV. Particulate Matter

A. PM_{10} as Coarse Particle Indicator

We now turn to petitioners' challenges to the Agency's regulation of coarse particulate pollution. Both the 1987 NAAQS and the proposed standards regulate all particles with diameters under 10 micrometers, signified by the indicator PM_{10}. The PM_{10} spectrum includes both coarse and fine particles. While the main distinction between coarse and fine particles is the process by which they are produced, EPA and epidemiologists who study the health effects of particulate pollution identify coarse and fine particles through rough approximations of those particles' diameters. Coarse particles, which become airborne usually from the crushing and grinding of solids, generally have diameters between 2.5 and 10 micrometers and can thus be identified by the indicator $PM_{10-2.5}$. Fine particles, indicated in these new NAAQS by $PM_{2.5}$, come mainly from combustion or gases and generally have diameters of 2.5 micrometers or less.

Despite EPA's conclusion that coarse and fine particles pose independent and distinct threats to public health, the Agency chose not to adopt an indicator, such as $PM_{10-2.5}$, that would measure only the coarse fraction of PM_{10}. Petitioners make two arguments: that there is no scientific basis for regulating coarse particles at all, and that even if there were, retention of the PM_{10} indicator simultaneously with the establishment of the new fine particle indicator is unsupported by evidence in the record and arbitrary and capricious. We agree with this latter argument.

Beginning with petitioners' first challenge, we think the record contains sufficient evidence to justify the Agency's decision to regulate coarse particulate pollution. While the relationship between PM_{10} pollution and adverse health effects justifying the 1987 NAAQS was well-established, see NRDC v. EPA, 284 U.S. App. D.C. 136, 902 F.2d 962, 967-68 (D.C. Cir. 1990), two studies contained in the record of these proceedings concentrated specifically on the health effects caused by the coarse fraction of PM_{10} pollution. See Mary Ellen Gordian et al., "Particulate Air Pollution and Respiratory Disease in Anchorage, Alaska," 104 Envtl. Health Persp. 290 (1996) (studying volcanic ash); Brockton J. Hefflin et al., "Surveillance for Dust Storms and Respiratory Diseases in Washington State, 1991," 49 Archives of Envtl. Health 170 (1994) (studying fugitive dust). In addition, the record contains at least nine multivariate analyses finding statistically significant relationships with health effects for both $PM_{2.5}$ and PM_{10}, suggesting that the portion of PM_{10} pollution unaccounted for by $PM_{2.5}$ (i.e., coarse particles) explains some of the observed adverse health effects. In other words, because regression analysis holds the $PM_{2.5}$ component constant, the PM_{10} effect recognized in these equations actually evidences results from coarse particulate pollution. To be sure, petitioners have pointed to some evidence to the contrary. But given that our review is limited to "ascertaining that the choices made by the Administrator were reasonable and supported by the record," and does not include "judging the merits of competing expert views," Lead Industries, 647 F.2d at 1160, we find ample support for EPA's decision to regulate coarse particulate pollution above the 1987 levels.

Having found independent health consequences from coarse particulate pollution, EPA nevertheless decided to regulate the coarse fraction of PM_{10} indirectly, using PM_{10} (which includes both coarse and fine PM) as a "surrogate for

coarse fraction particles." PM Final Rule, 62 Fed. Reg. at 38,668/2. While recognizing that $PM_{10-2.5}$ would have served as a satisfactory coarse particle indicator, EPA offers three justifications for its decision to use PM_{10} instead: (1) Both the Gordian and Hefflin studies used PM_{10}, not $PM_{10-2.5}$, as the variable in their models, (2) the PM_{10} standards will work in conjunction with the $PM_{2.5}$ standards by regulating the portion of particulate pollution not regulated by the $PM_{2.5}$ standards, and (3) a nationwide monitoring program for PM_{10} already exists. We find none of these explanations persuasive.

As to the first argument, while acknowledging that the indicator used in the studies captures both coarse and fine particles, EPA nevertheless maintains that PM_{10} is an effective indicator for the regulation of coarse particulate pollution. "Adopting the indicator used in the studies," the Agency says, "increases the likelihood that the level selected will result in the health protections predicted." But as EPA's own staff paper suggests, PM_{10} is "inherently confounded" by the presence of $PM_{2.5}$ particles, meaning that any regulation of PM_{10} pollution will include both coarse and fine particles. See PM Staff Paper at V-59. Using PM_{10} as the coarse particle indicator, instead of $PM_{10-2.5}$, will thus regulate more than just the coarse fraction of PM_{10}, and the amount of coarse particulate pollution permitted will depend (quite arbitrarily) on the amount of $PM_{2.5}$ pollution in the air. For example, assuming the 50 microgram annual PM_{10} level adopted by the Agency and a region with an annual $PM_{2.5}$ pollution level of 15 micrograms, the PM_{10} indicator would prohibit coarse particulate ($PM_{10-2.5}$) pollution from exceeding 35 micrograms. But in an area with only 5 micrograms of $PM_{2.5}$ pollution, the NAAQS would permit coarse particulate pollution to reach as high as 45 micrograms.

EPA's second argument--that the PM_{10} standard will work in conjunction with the $PM_{2.5}$ standard--suffers from the

same deficiency. Accepting EPA's finding of "profound physicochemical differences" between coarse and fine PM, PM Staff Paper at V-59, such that each requires independent regulation, we cannot discern exactly how a PM_{10} standard, instead of a $PM_{10-2.5}$ standard, will work alongside a $PM_{2.5}$ standard to regulate only the coarse fraction of PM_{10}. EPA provides no explanation to aid us in understanding its decision. In fact, as the example above indicates, it is the very presence of a separate $PM_{2.5}$ standard that makes retention of the PM_{10} indicator arbitrary and capricious. Far from working in conjunction to regulate coarse particles, PM_{10} and $PM_{2.5}$ indicators, when used together, lead to "double regulation" of the $PM_{2.5}$ component of PM_{10} and potential underregulation of the $PM_{10-2.5}$ component since the amount of $PM_{10-2.5}$ permitted will always depend on the amount of $PM_{2.5}$ in the air.

EPA's final argument is pragmatic. It maintains that PM_{10} is a better indicator than $PM_{10-2.5}$ for coarse particulate pollution because a nationwide monitoring program for PM_{10} already exists. But as EPA acknowledges elsewhere in its brief, NRDC bars EPA from considering factors unrelated to public health in setting air quality standards. Echoing our decision in Vinyl Chloride, NRDC held that "the Administrator may not consider cost and technological feasibility in determining what is 'safe'; such a determination 'must be based solely upon the risk to health.' " NRDC, 902 F.2d at 973 (quoting "Vinyl Chloride", 263 U.S. App. D.C. 166, 824 F.2d 1146, 1166 (D.C. Cir. 1990) (in banc)); see also American Petroleum Inst. v. Costle, 214 U.S. App. D.C. 358, 665 F.2d 1176, 1185 (D.C. Cir. 1981); Lead Industries, 647 F.2d at 1148-55. The administrative convenience of using PM_{10} cannot justify choosing an indicator poorly matched to the relevant pollution agent.

In view of our conclusion that PM_{10} amounts to an arbitrary indicator for coarse particle pollution, we need not address petitioners' separate challenge to the PM_{10} levels or secondary standards. We note, however, that whatever levels the Agency ultimately selects for coarse particle pollution will need to comply with the requirements set forth in Part I of this opinion.

B. Fine Particles as "New Pollutant"

The Attorneys General of Ohio, Michigan, and West Virginia ("state petitioners") argue that EPA is regulating $PM_{2.5}$ for the first time. Because they consider $PM_{2.5}$ to be a "new pollutant," they argue that § 108 of the Clean Air Act requires EPA to conduct further research on $PM_{2.5}$'s health effects before listing it as a pollutant, to issue an air quality criteria document reflecting the latest science on the health effects of the pollutant, and to assist states by developing "data relating to the cost of installation and operation, energy requirements, emission reduction benefits, and environmental impact of the emission control technology." 42 U.S.C. § 7408(b)(1).

Although EPA never responds to this argument, five northeastern states (as respondent intervenors and amici) do. Pointing out that previous NAAQS have always included $PM_{2.5}$, these attorneys general support the EPA's decision not to list $PM_{2.5}$ separately as a new pollutant. We agree.

The state petitioners cannot escape the fact that the original standards for particulate pollution using Total Suspended Particulates (TSP) as indicator, as well as the 1987 NAAQS that used PM_{10}, included by definition every particle 2.5 micrometers and smaller. Moreover, in some areas fine particles often dominate PM_{10} pollution. See PM Staff Paper at V-63. By refining the NAAQS to focus on smaller particles that

EPA found posed distinct threats to public health, EPA has done with these regulations exactly what we held it could do in 1987 when it made the change from Total Suspended Particulates to PM_{10}. See NRDC, 902 F.2d at 965-66. EPA's decision to update the NAAQS to focus on $PM_{2.5}$ merely continues a trend based on evolving science. It does not violate the provisions of § 108 of the Clean Air Act.

C. Failure to Identify a Biological Mechanism for Particulate Pollution's Relationship to Adverse Health Effects

Also challenging the establishment of a fine particle standard, non-state petitioners argue that EPA failed to explain the biological mechanism through which particulate pollution causes adverse health effects. Even if epidemiological studies show robust statistical relationships between pollution and health effects, they say, the absence of proof of causation-i.e., how particles actually interact with cells and organs to cause sickness and death--is fatal to the standard. We disagree.

To begin with, the statute itself requires no such proof. The Administrator may regulate air pollutants "emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7408(a)(1)(A) (1994) (emphasis added). Moreover, this court has never required the type of explanation petitioners seek from EPA. In fact, we have expressly held that EPA's decision to adopt and set air quality standards need only be based on "reasonable extrapolations from some reliable evidence." NRDC v. Thomas, 256 U.S. App. D.C. 310, 805 F.2d 410, 432 (D.C. Cir. 1986). Indeed, were we to accept petitioners' view, EPA (or any agency for that matter) would be powerless to act whenever it first recognizes clear trends of mortality or morbidity in areas dominated by a particular pathogen.

The numerous epidemiological studies appearing in this record, some of which EPA also used to support the 1987 NAAQS, easily satisfy the standard articulated in the statute and emphasized repeatedly in decisions of this court. Covering diverse geographic locations with widely varying mixes of air pollution, the studies found statistically significant relationships between air-borne particulates signified by a variety of indicators and adverse health effects. Given EPA's statutory mandate to establish standards based on "the latest scientific knowledge," 42 U.S.C. §§ 7408(a)(2), 7409(d), the growing empirical evidence demonstrating a relationship between fine particle pollution and adverse health effects amply justifies establishment of new fine particle standards.

D. Visibility Effects

The Environmental Petitioners challenge the EPA's decision to set the secondary $PM_{2.5}$ NAAQS at levels equivalent to the primary NAAQS. According to the petitioners, the EPA's failure to set the secondary NAAQS at more stringent levels will result in "adverse visibility impacts" in parts of the country. In view of our conclusion in Part I, above, that the EPA has not adequately explained the principles upon which it relied in setting the levels in the NAAQS for PM, we need not reach the main thrust of the petitioners' challenge to the secondary NAAQS. On the other hand, the Environmental Petitioners have also raised a question of statutory interpretation, the resolution of which should assist the EPA if it revisits its decision to set the secondary $PM_{2.5}$ NAAQS.

In the PM Final Rule, the EPA decided "to address the welfare effects of PM on visibility by setting secondary standards identical to the suite of $PM_{2.5}$ primary standards, in conjunction with the establishment of a regional haze program under § 169A of the Act." PM Final Rule, 62 Fed. Reg. at

38,679/3. Section 169A "declares as a national goal the prevention ... and the remedying of any ... impairment of visibility in mandatory class I Federal areas ... resulting from manmade air pollution." 42 U.S.C. § 7491. Mandatory class I areas include all international parks, and national parks and wilderness areas of a certain size. See 42 U.S.C. § 7472(a). The EPA concluded that reduction of $PM_{2.5}$ levels in class I areas would benefit the surrounding areas as well because "the same haze that degrades visibility within or looking out from a national park also degrades visibility outside it." PM Final Rule, 62 Fed. Reg. at 38,682/1.

The Environmental Petitioners argue that § 109(b)(2), 42 U.S.C. § 7409(b)(2), requires the EPA to set secondary NAAQS at a level sufficient to eliminate all adverse visibility effects and that it leaves the EPA no discretion to decide that some visibility impairment is better remedied through another program. This argument must be wrong. For, as the EPA argues, the Congress required the EPA to implement a regional haze program specifically in order to address adverse visibility effects that persist in class I areas after attainment of the secondary NAAQS. See 42 U.S.C. § 7470(1) (purpose of this part of Clean Air Act is "to protect public ... welfare from any actual or potential adverse effect which ... may reasonably be anticipated to occur ... notwithstanding attainment and maintenance of all [NAAQS]"). Accordingly, we conclude that the Congress did not intend the secondary NAAQS to eliminate all adverse visibility effects and, therefore, that the EPA acted within the scope of its authority in deciding to rely upon the regional haze program to mitigate some of the adverse visibility effects caused by $PM_{2.5}$.

Conclusion

We remand the cases to EPA for further consideration of all standards at issue. We do not vacate the new ozone standards because the standard is unlikely to engender costly compliance activities in light of our determination that it cannot be enforced by virtue of Clean Air Act § 181(a), 42 U.S.C. § 7511(a). We vacate the challenged coarse particulate matter standards because EPA will have to develop different standards when it corrects the arbitrarily chosen PM_{10} indicator. As to the fine particulate matter standards, we invite briefing on the question of remedy: possibilities include but are not limited to vacatur, non-vacatur subject to application to vacate, and non-vacatur.[8] An order giving the briefing particulars will follow.

Because of the substantial investment of time this matter has required and the many unresolved issues bearing on application of whatever standards may emerge, this panel will in the interest of judicial economy retain jurisdiction over the cases following remand. See Sierra Club v. Gorsuch, 230 U.S. App. D.C. 179, 715 F.2d 653, 661 (D.C. Cir. 1983).

TATEL, Circuit Judge, dissenting from Part I:

The Clean Air Act has been on the books for decades, has been amended by Congress numerous times, and has been the subject of regular congressional oversight hearings. The Act has been parsed by this circuit no fewer than ten times in published opinions delineating EPA authority in the NAAQS setting process. Yet this court now threatens to strike down section 109 of the Act as an unconstitutional delegation of

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[8]Briefing should address the possibility that the previous particulate matter standard will spring back to life in response to our decision to vacate the new coarse particulate matter standard.

congressional authority unless EPA can articulate an intelligible principle cabining its discretion. In doing so, the court ignores the last half-century of Supreme Court nondelegation jurisprudence, apparently viewing these permissive precedents as mere exceptions to the rule laid down 64 years ago in A.L.A. Schechter Poultry Corp. v. United States, 295 U.S. 495, 79 L. Ed. 1570, 55 S. Ct. 837 (1935). Because section 109's delegation of authority is narrower and more principled than delegations the Supreme Court and this court have upheld since Schechter Poultry, and because the record in this case demonstrates that EPA's discretion was in fact cabined by section 109, I respectfully dissent.

Section 109 requires EPA to publish air quality standards "the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health." 42 U.S.C. § 7409(b)(1) (1994). Compare section 109 to the language of section 303 of the Communications Act of 1934, which gave the FCC authority to regulate broadcast licensing in the "public interest," and which the Supreme Court sustained in National Broadcasting Co. v. United States, 319 U.S. 190, 225-26, 87 L. Ed. 1344, 63 S. Ct. 997 (1943). The FCC's general authority to issue regulations "as public convenience, interest, or necessity requires" was sustained in United States v. Southwestern Cable Co., 392 U.S. 157, 178, 20 L. Ed. 2d 1001, 88 S. Ct. 1994 (1968). The Supreme Court has sustained equally broad delegations to other agencies, including the Price Administrator's authority to fix "fair and equitable" commodities prices, Yakus v. United States, 321 U.S. 414, 426-27, 88 L. Ed. 834, 64 S. Ct. 660 (1944), the Federal Power Commission's authority to determine "just and reasonable" rates, FPC v. Hope Natural Gas Co., 320 U.S. 591, 600, 88 L. Ed. 333, 64 S. Ct. 281 (1944), the War Department's authority to recover "excessive profits" earned on

military contracts, Lichter v. United States, 334 U.S. 742, 778-786, 92 L. Ed. 1694, 68 S. Ct. 1294 (1948), and the Attorney General's authority to regulate new drugs that pose an "imminent hazard to public safety," Touby v. United States, 500 U.S. 160, 165, 114 L. Ed. 2d 219, 111 S. Ct. 1752 (1991). See also Milk Indus. Foundation v. Glickman, 328 U.S. App. D.C. 121, 132 F.3d 1467, 1475 (D.C. Cir. 1998) (upholding delegation to Secretary of Agriculture to approve interstate compacts upon a finding of "compelling public interest").

Given this extensive Supreme Court precedent sustaining general congressional delegations, no wonder the First Circuit rejected a similar nondelegation challenge to the Clean Air Act's "requisite to protect the public health" language:

> The power granted to EPA is not "unconfined and vagrant". [Schechter Poultry, 295 U.S. at 551 (Cardozo, J., concurring).] The Agency has been given a well defined task by Congress--to reduce pollution to levels "requisite to protect the public health", in the case of primary standards. The Clean Air Act outlines the approach to be followed by the Agency and describes in detail many of its powers.... Yet there are many benchmarks to guide the Agency and the courts in determining whether or not EPA is exceeding its powers, not the least of which is that the rationality of the means can be tested against goals capable of fairly precise definition in the language of science.
>
> Administrative agencies are created by Congress because it is impossible for the Legislature to acquire sufficient information to manage each detail in the long process of extirpating the abuses identified by the legislation; the Agency must have flexibility to

> implement the congressional mandate. Therefore, although the delegation to EPA was a broad one, ... we have little difficulty concluding that the delegation was not excessive.

South Terminal Corp. v. EPA, 504 F.2d 646, 677 (1st Cir. 1974).

I do not agree with my colleagues that International Union, UAW v. OSHA, 291 U.S. App. D.C. 51, 938 F.2d 1310 (D.C. Cir. 1991) ("Lockout/Tagout I"), requires a different result. That case remanded to OSHA for a more precise definition of section 3(8) of the Occupational Safety and Health Act, which granted the Agency authority to enact workplace safety standards "reasonably necessary or appropriate to provide safe or healthful employment or places of employment." 938 F.2d at 1316. The Clean Air Act does not delegate to EPA authority to do whatever is "reasonably necessary or appropriate" to protect public health. Instead, the statute directs the Agency to fashion standards that are "requisite" to protect the public health. In other words, EPA must set pollution standards at levels necessary to protect the public health, whether "reasonable" or not, whether "appropriate" or not.

Moreover, in setting standards "requisite to protect the public health" EPA discretion is not unlimited. The Clean Air Act directs EPA to base standards on "air quality criteria" that "accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities." 42 U.S.C. § 7408(a)(2); see id. § 7409(b)(1); see also id. § 7408(a)(2) (requiring air quality criteria, "to the extent practicable," to "include information on--(A) those variable

factors (including atmospheric conditions) which of themselves or in combination with other factors may alter the effects on public health or welfare of such air pollutant; (B) the types of air pollutants which, when present in the atmosphere, may interact with such pollutant to produce an adverse effect on public health or welfare; and (C) any known or anticipated adverse effects on welfare"). Indeed, the principles constraining EPA discretion are at least as specific as those this court sustained in Lockout/Tagout II, i.e., that OSHA must identify a " 'significant' safety risk, to enact a safety standard that provides 'a high degree of worker protection'." International Union, UAW v. OSHA, 308 U.S. App. D.C. 368, 37 F.3d 665, 669 (D.C. Cir. 1994) ("Lockout/Tagout II"). By directing EPA to set NAAQS at levels "requisite"-not reasonably requisite--to protect the public health with "an adequate margin of safety," the Clean Air Act tells EPA exactly the same thing, i.e., ensure a high degree of protection.

Although this court's opinion might lead one to think that section 109's language permitted EPA to exercise unfettered discretion in choosing NAAQS, the record shows that EPA actually adhered to a disciplined decisionmaking process constrained by the statute's directive to set standards "requisite to protect the public health" based on criteria reflecting the "latest scientific knowledge." To identify which health effects were "significant enough" to warrant protection, EPA followed guidelines published by the American Thoracic Society. See National Ambient Air Quality Standards for Ozone: Proposed Decision, 61 Fed. Reg. 65,716, 65,722/1 (1996). It then set the ozone and fine particle standards within ranges recommended by CASAC, the independent scientific advisory committee created pursuant to section 109 of the Act. See 42 U.S.C. § 7409(d)(2).

CASAC must consist of at least one member of the National Academy of Sciences, one physician, and one person representing state air pollution control agencies. See id. § 7409(d)(2)(A). In this case, CASAC also included medical doctors, epidemiologists, toxicologists and environmental scientists from leading research universities and institutions throughout the country. EPA must explain any departures from CASAC's recommendations. See id. § 7607(d)(3). Bringing scientific methods to their evaluation of the Agency's Criteria Document and Staff Paper, CASAC provides an objective justification for the pollution standards the Agency selects. Cf. Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 593, 125 L. Ed. 2d 469, 113 S. Ct. 2786 (1993) (" 'Scientific methodology today is based on generating hypotheses and testing them to see if they can be falsified; indeed, this methodology today is what distinguishes science from other fields of human inquiry.' ") (citation omitted). Other federal agencies with rulemaking responsibilities in technical fields also rely heavily on the recommendations, policy advice, and critical review that scientific advisory committees provide. See, e.g., 21 U.S.C. § 355(n) (describing scientific advisory panels for the Food and Drug Administration); 49 U.S.C. § 44912(c) (creating a scientific advisory panel for the Federal Aviation Administration).

Beginning with CASAC's ozone recommendations--not one member recommended going below .08 ppm--EPA gave two perfectly rational explanations for the level it selected. First, it set the annual level based on the different types of health effects observed above and below .08 ppm. Particularly below .08, the Agency determined, "the most certain [ozone-]related effects, while judged to be adverse, are transient and reversible." National Ambient Air Quality Standards for Ozone, 62 Fed. Reg. 38,856, 38,868/2 (1997) (emphasis added). Characterizing this explanation as saying nothing more than

that "lower exposure levels are associated with lower risk to public health," Maj. Op. at 10, my colleagues find the Agency's reasoning unintelligible. But EPA did not find simply that public health risks decrease at lower levels. Instead, it found that public health effects differ below .08 ppm, i.e., that they are "transient and reversible."

Second, EPA explained that the level should not be set below naturally occurring background ozone concentrations. The Agency selected .08 ppm because it found that "a 0.07 ppm level would be closer to peak background levels that infrequently occur in some areas due to nonanthropogenic sources of [ozone] precursors, and thus more likely to be inappropriately targeted in some areas on such sources." 62 Fed. Reg. at 38,868/3. Of course, any level of ozone pollution above background concentrations is closer to background levels than one just above it. See Maj. Op. at 11. But as I read EPA's explanation, the Agency found that peak background levels sometimes occur at .07 ppm, not at .08 ppm. Indeed, the data EPA provided in its "Responses to Significant Comments" show a range of background concentrations from a low of .042 ppm in Olympic National Park in Washington to a high of .075 ppm in Quachita National Forest in Arizona. No region registered background levels above .075 ppm. See U.S. ENVIRONMENTAL PROTECTION AGENCY, RESPONSES TO SIGNIFICANT COMMENTS ON THE 1996 PROPOSED RULE ON THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE 94-96 (July 1997). In other words, by setting the annual standard at .08 rather than .07 ppm, EPA ensured that if a region surpasses the ozone standard, it will do so because of controllable human activity, not because of uncontrollable natural levels of ozone.

EPA offered an equally reasonable explanation for the fine particle pollution standard. Again limiting itself to the

range approved by CASAC, EPA set the annual standard for $PM_{2.5}$ pollution at the lowest level where it had confidence that the epidemiological evidence (filtered through peer-reviewed, published studies) displayed a statistically significant relationship between air pollution and adverse public health effects.

Recognizing that its decision must "accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health," 42 U.S.C. § 7408(a)(2), EPA focused on three studies in the record that displayed a statistically significant relationship between fine particle pollution and adverse health effects: Joel Schwartz et al., Is Daily Mortality Associated Specifically with Fine Particles?, 46 J. AIR & WASTE MGMT. ASS'N 927 (1996); Joel Schwartz et al., Acute Effects of Summer Air Pollution on Respiratory Symptom Reporting in Children, 150 AM. J. RESPIRATORY & CRITICAL CARE MED. 1234 (1994); and Douglas W. Dockery et al., An Association between Air Pollution and Mortality in Six U.S. Cities, 329 NEW ENG. J. MED. 1753 (1993). The Agency explained that "there is generally greatest statistical confidence in observed associations [between fine particle pollution and adverse health effects] for levels at and above the mean concentration [of pollution observed in the studies that showed a statistically significant relationship]." National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652, 38,676/1 n.42 (1997) (emphasis added). Allowing "an adequate margin of safety," EPA then set the annual fine particle standard just below the lowest mean pollution levels observed in those studies, at 15 Sg/m3. See id. at 38,676/1 ("An examination of the long-term means from the combined six city analyses of daily mortality [Schwartz et al. (1996)] and morbidity [Schwartz et al. (1994)], together with those from studies in individual cities for which statistically significant PM-effects associations are reported ...

finds mean concentrations ranging from about 16 to about 21 Sg/m3...."); id. at 38,676/2 ("[The EPA] Staff Paper assessment of the concentration-response results [from Dockery et al. (1993)], concluded that the evidence for increased risk was more apparent at annual concentrations at or above 15 Sg/m3....").

In a passage directly answering this court's concerns, see Maj. Op. at 11-12, the Staff Paper explained why the longterm mean served as a reasonable level for setting the fine particle NAAQS:

> The mean (or median) concentration may serve as a reasonable cutpoint of increased PM health risk since at this point there is generally the greatest confidence (i.e., the smallest confidence intervals) in the association and the reported [relative risk] estimates. The mean concentration considered by staff as most informative to test implications of potential alternative concentration response functions is the minimum mean concentration associated with a study or studies reporting statistically significant increases in risk across a number of study locations....

OFFICE OF AIR QUALITY PLANNING AND STANDARDS, U.S. ENVIRONMENTAL PROTECTION AGENCY, REVIEW OF NATIONAL AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER: POLICY ASSESSMENT OF SCIENTIFIC AND TECHNICAL INFORMATION, at E-4 (1996) (emphasis added).

EPA thus did not, as my colleagues charge, arbitrarily pick points on the ozone and particulate pollution continua indistinguishable from any other. Instead, acting pursuant to

section 109's direction that it establish standards that, based on the "latest scientific knowledge" are "requisite" to protect the public health with "an adequate margin of safety," and operating within ranges approved by CASAC, the Agency set the ozone level just above peak background concentrations where the most certain health effects are not transient and reversible, and the fine particle level at the lowest long-term mean concentration observed in studies that showed a statistically significant relationship between fine particle pollution and adverse health effects. Whether EPA arbitrarily selected the studies it relied upon or drew mistaken conclusions from those studies (as petitioners argue), or whether EPA failed to live up to the principles it established for itself (as my colleagues believe, see Maj. Op. at 9-12), has nothing to do with our inquiry under the nondelegation doctrine. Those issues relate to whether the NAAQS are arbitrary and capricious. See NRDC v. EPA, 284 U.S. App. D.C. 136, 902 F.2d 962, 969, 971 (D.C. Cir. 1989). The Constitution requires that Congress articulate intelligible principles; Congress has done so here.

A final point. Unlike OSHA, which Lockout/Tagout I recognized has authority to reach into every workplace to dictate what is safe, to impose extensive civil and criminal penalties, and "to decide which firms will live and which will die," Lockout/Tagout I, 938 F.2d at 1318, EPA regulates primarily by setting standards for states to develop their own plans. See 42 U.S.C. § 7401(a)(3) (Congress finds "that air pollution prevention ... and air pollution control at its source is the primary responsibility of States and local governments."). Indeed, because states have three years to submit implementation plans, which are themselves subject to notice, comment, public hearing, and frequent renegotiation, we will not know for years precisely how the ozone and particle NAAQS will actually affect individual businesses. Only if a state fails to produce an acceptable plan can EPA terminate

federal highway funds or impose its own implementation plan. Because the Clean Air Act gives politically accountable state governments primary responsibility for determining how to distribute the burdens of pollution reduction and therefore how the NAAQS will affect specific industries and individual businesses, courts have less reason to second-guess the specificity of the congressional delegation. Moreover, if the states disagree with the standards EPA has set, they have 535 representatives in Congress to turn to for help. In fact, legislation to overturn the very NAAQS at issue in this case was introduced in the last Congress. See H.R. 1984, 105th Cong. (1997) ("A bill to provide for a four-year moratorium on the establishment of new standards for ozone and fine particulate matter under the Clean Air Act, pending further implementation of the Clean Air Act Amendments of 1990, additional review and air quality monitoring under that Act."); S. 1084, 105th Cong. (1997) ("A bill to establish a research and monitoring program for the national ambient air quality standards for ozone and particulate matter and to reinstate the original standards under the Clean Air Act, and for other purposes.").

No. 97-1440

AMERICAN TRUCKING ASSOCIATIONS, ET AL.,
Petitioners

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
Intervenors

Consolidated with
Nos. 97-1546, 97-1548, 97-1551, 97-1552, 97-1553, 97-1555, 97-1559, 97-1561, 97-1562, 97-1565, 97-1567, 97-1571, 97-1573, 97-1574, 97-1576, 97-1578, 97-1579, 97-1583, 97-1583, 97-1586, 97-1587, 97-1588, 97-1592, 97-1594, 97-1596, 97-1597, 97-1598

No. 97-1441

AMERICAN TRUCKING ASSOCIATIONS, ET AL.,
Petitioners

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
Intervenors

Consolidated with

Nos. 97-1502, 97-1505, 97-1508, 97-1509, 97-1510, 97-1512, 97-1513, 97-1514, 97-1518, 97-1519, 97-1526, 97-1531, 97-1539, 97-1566, 97-1568, 97-1570, 97-1572, 97-1575, 97-1584, 97-1589, 97-1591, 97-1595, 97-1619

United States Court of Appeals,
District of Columbia Circuit

Decided October 29, 1999.

Before WILLIAMS, GINSBURG, and TATEL, *Circuit Judges*. TATEL, *Circuit Judge*, concurring in part and dissenting in part.

This matter is before the court for consideration of respondent Environmental Protection Agency's (EPA) petition for panel rehearing in Nos 97-1440 and 97-1441, the responses thereto, and the petitions for panel rehearing of intervenors-respondents New Jersey and Massachusetts in Nos. 97-1440 and 97-1441, Citizen for Balanced Transportation, et al. in No. 97-1440, and the American Lung Association in Nos. 97-1440 and 97-1441. Upon consideration of the foregoing, it is

ORDERED that the petitions of EPA, New Jersey and Massachusetts, and the American Lung Association be granted in part. The court accordingly modifies Parts III.A.2 & .3 and the conclusion of the court's original opinion as set forth in the opinion of the court filed herein this date. It is

FURTHER ORDERED that the remainder of EPA, New Jersey and Massachusetts, and the American Lung Association's petitions be denied and that Citizen for Balanced Transportation's petition be denied.

Opinion for the Court filed PER CURIAM:

The Environmental Protection Agency petitions for rehearing, challenging this court's holdings that: (1) with respect to the factors the agency uses to determine the degree of public health concern associated with different levels of a pollutant, it "appears to have articulated no 'intelligible principle' to channel its application of these factors; nor is one apparent from the statute," American Trucking Ass'ns v. United States Environmental Protection Agency, 175 F.3d 1027, 1034 (D.C. Cir. 1999); (2) "Subpart 2, not Subpart 1, provides the classifications and attainment dates for any areas designated nonattainment under a revised primary ozone NAAQS, and the EPA must enforce any revised primary ozone NAAQS under Subpart 2," id. at 1050; and (3) "EPA must consider positive identifiable effects of a pollutant's presence in the ambient air in formulating air quality criteria under § 108 and NAAQS under § 109," id. at 1052. For the following reasons, we grant the petition for rehearing in part and deny it in part.

I. Delegation

In the EPA's petition for rehearing, counsel for the agency argue that § 109 of the Clean Air Act contains the following principle limiting the agency's discretion: "The levels [set in a NAAQS] must be necessary for public health protection: neither more nor less stringent than necessary, but 'requisite.' "EPA Pet. at 8 (emphases in original). Further, counsel claim that in setting the NAAQS at issue in this case the agency applied corollaries of this principle, one for

particulate matter, one for ozone,[1] to derive determinate standards.

In denying the EPA's petition for rehearing on this issue, we note that the agency previously put forward neither the assertedly intelligible principle its counsel now claim to find in the statute nor the corollaries its counsel now implicitly derive therefrom. To be sure, in the rulemakings that set the NAAQS, the EPA mentioned the corollary propositions its counsel now claim served as intelligible limiting principles, but the agency did not identify either as a limit upon its discretion; the EPA never suggested that it could not (or in a later rulemaking would not) base a NAAQS upon evidence that did not meet the 95 percent confidence level or that revealed adverse but transient effects.[2] In its briefs defending the NAAQS, the EPA merely asserted that the Clean Air Act provides an intelligible principle; it failed both to state that principle and to argue that its revised NAAQS were promulgated in accordance with that principle. EPA PM Brief at 145-49; EPA Ozone Brief at 77-80. Indeed, the EPA's briefs in each of these two cases contained

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[1]For particulate matter, counsel now state that the EPA's decision was determined by the norm of "the 95 percent confidence level to separate results that could be the product of chance from more convincing evidence of causation." EPA Pet. at 15. For ozone, counsel now state that EPA inferred the existence of effects below 0.08 ppm, but nonetheless concluded that they were "less serious because they are 'transient and reversible.' " EPA Pet. at 16.

[2]The court's opinion mentioned EPA's observation in the record that effects of ozone concentrations below the standard selected were "transient and reversible," 175 F.3d at 1035, but only in connection with the dissent's suggestion, see id. at 1059, that this was the controlling principle.

the same four sentences assuring the court that the statute provides a principle without explaining what the agency understands that principle to be:

> [Section] 109(b)(1) requires EPA to promulgate NAAQS based on air quality criteria issued under § 108 that are "requisite to protect the public health" with "an adequate margin of safety." This language and related legislative history provide directions for EPA to follow in setting the NAAQS. Moreover, EPA has consistently interpreted § 109(b)(1) to provide further decisionmaking criteria to guide the standard setting process. Thus, the CAA provides a more than sufficient "intelligible principle" to guide EPA's discretion. EPA Ozone Brief at 78; see also EPA PM Brief at 148.

These sentences begged the key question about that intelligible principle: "What is it?"

As we noted in our first opinion in this case, when "statutory language and an existing agency interpretation involve an unconstitutional delegation of power, but an interpretation without the constitutional weakness is or may be available, our response is not to strike down the statute but to give the agency an opportunity to extract a determinate standard on its own." 175 F.3d at 1038. Counsel for the EPA have now extracted from the statute what they contend is an intelligible principle limiting the EPA's discretion. We express no opinion upon the sufficiency of that principle; only after the EPA itself has applied it in setting a NAAQS can we say whether the principle, in practice, fulfills the purposes of the nondelegation doctrine. See Yakus v. United States, 321 U.S. 414, 424-26, 88 L. Ed. 834, 64 S. Ct. 660 (1944); Amalgamated Meat Cutters v. Connally, 337 F. Supp. 737, 759 (D.D.C. 1971) (Leventhal, J., for three-judge panel).

A final word about our nondelegation holding: The Supreme Court has long held that an ambiguous principle in a statute delegating power to an agency can gain "meaningful content from the purpose of the Act, its factual background and the statutory context in which [it] appears." American Power & Light Co. v. SEC, 329 U.S. 90, 104, 91 L. Ed. 103, 67 S. Ct. 133 (1946); see also Federal Radio Comm'n v. Nelson Bros. Bond & Mort. Co., 289 U.S. 266, 285, 77 L. Ed. 1166, 53 S. Ct. 627 (1933) (upholding delegation to Federal Radio Commission to grant licenses "as public convenience, interest or necessity requires" in light of "its context [and] the nature of radio transmission and reception"); Fahey v. Mallonee, 332 U.S. 245, 250, 91 L. Ed. 2030, 67 S. Ct. 1552 (1947) (upholding delegation to the Federal Home Loan Bank Board to promulgate regulations for the appointment of a conservator for savings and loan associations in view of the banking industry's "well-defined practices for the appointment of conservators"). This court has done the same. See, e.g., National Ass'n of Broadcasters v. Copyright Royalty Tribunal, 218 U.S. App. D.C. 348, 675 F.2d 367, 376 n.12 (1982) (finding an intelligible principle to guide the tribunal in disbursing cable royalty fees in "specific statements in the legislative history and in the general philosophy of the Act itself"); Amalgamated Meat Cutters, 337 F. Supp. at 747-49 (interpreting the Economic Stabilization Act of 1970 in light of "the historic context of government stabilization measures" in order to "negative[ ] a conclusion that the whole program was set adrift without a rudder"). To choose among permissible interpretations of an ambiguous principle, of course, is to make a policy decision, and since Chevron it has been clear that "the responsibilities for assessing the wisdom of such policy choices ... are not judicial ones." Chevron U.S.A. Inc. v. NRDC, 467 U.S. 837, 866, 81 L. Ed. 2d 694, 104 S. Ct. 2778 (1984). Accordingly, just as we must defer to an agency's reasonable interpretation of an ambiguous statutory term, we must defer to

an agency's reasonable interpretation of a statute containing only an ambiguous principle by which to guide its exercise of delegated authority. But see Kenneth Culp Davis, A New Approach to Delegation, 36 U. CHI. L. REV. 713, 713 (1969) (arguing that "judicial inquiries [under the nondelegation doctrine] should shift from statutory standards to administrative safeguards"). In sum, the approach of the Benzene case, in which the Supreme Court itself identified an intelligible principle in an ambiguous statute, has given way to the approach of Chevron. See Industrial Union Dep't v. American Petroleum Inst. (Benzene), 448 U.S. 607, 642, 646, 65 L. Ed. 2d 1010, 100 S. Ct. 2844 (1980) (Stevens, J., plurality) (interpreting § 3(8) of the Occupational Health and Safety Act to require "a threshold finding ... that significant risks are present," thereby finding in the statute an intelligible principle).[3]

II. Subpart 2 and the Revised Ozone Standard

In its petition for rehearing, the EPA challenges the holdings in Parts III.A.2 and III.A.3 of our original opinion, see 175 F.3d at 1048-51, as well as our jurisdiction to reach those issues. We address the jurisdictional point first.

A. Jurisdiction

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[3]We note that Judge Silberman's dissent from the denial of rehearing en banc turns largely on his dim view of the Court's use of the non-delegation doctrine in Benzene, which he characterizes as "only a makeweight, tossed into the analysis ... to help justify the result." Whatever the merits of Judge Silberman's critique of Benzene, we do not see how a lower court can properly rest its jurisprudence on the rejection of a Supreme Court decision.

The EPA argues that because it has taken no final action implementing the revised NAAQS this court lacks jurisdiction to reach the question whether Subpart 2 prevents the agency from implementing a revised ozone NAAQS under Subpart 1. See 42 U.S.C. § 7607(b) (limiting this court's jurisdiction to review of "nationally applicable regulations promulgated, or final agency action taken, by the Administrator"); see also Sierra Club v. Thomas, 264 U.S. App. D.C. 203, 828 F.2d 783, 792 (D.C. Cir. 1987).[4] That this claim is raised for the first time in a petition for rehearing does not, of course, alter our obligation to "satisfy ourself ... of [our] own jurisdiction." Steel Co. v. Citizens for a Better Environment, 523 U.S. 83, 118 S. Ct. 1003, 1012-13, 140 L. Ed. 2d 210 (1998).

Whether agency action is final for purposes of § 7607(b) entails a functional, not a formal, inquiry. See NRDC v. EPA, 306 U.S. App. D.C. 43, 22 F.3d 1125, 1132-33 (D.C. Cir. 1994); Ciba-Geigy Corp. v. EPA, 255 U.S. App. D.C. 216, 801 F.2d 430, 436 (D.C. Cir. 1986) ("Once the agency publicly articulates an unequivocal position ... and expects regulated entities to alter their primary conduct to conform to that position, the agency has voluntarily relinquished the benefit of postponed judicial review"). In this case, "there is nothing tentative about the EPA's interpretation of [Subpart 2]; it is unambiguous and devoid of any suggestion that it might be subject to subsequent revision." Her Majesty the Queen ex rel. Ontario v. EPA, 286 U.S. App. D.C. 171, 912 F.2d 1525, 1532 (D.C. Cir. 1990); see also Final Rule: National Ambient Air

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[4]The EPA has yet to designate an area nonattainment. Therefore, although the agency does not so argue, if it were correct, then this court would also lack jurisdiction to decide, as it did, that Subpart 2 does not alter the agency's power to designate areas as nonattainment under a revised NAAQS. See 175 F.3d at 1047-48.

Quality Standards for Ozone, 62 Fed. Reg. 38,856, 38,885/2 (1997) ("There is no language in sections 181 or 182 that precludes the implementation of a different [ozone] standard under other authority [i.e., Subpart 1]; those provisions [i.e., Subpart 2] simply govern the implementation of the 1-hour, 0.12 ppm O_3 standard"). Moreover, by promulgating a revised ozone NAAQS the EPA has triggered the provisions of §§ 107(d)(1) and 172, which impose a number of requirements upon the states, the first being that the Governor of each state must determine which areas do not presently comply with the revised NAAQS; those areas that do not comply will ultimately be required to do so. The EPA, therefore, has reached a final decision regarding its power to implement its revised ozone standard, which this court has jurisdiction to review.[5]

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[5]The EPA attempts to buttress its jurisdictional argument by reference to 42 U.S.C. § 7502(a)(1)(B), which it claims "defers challenges to EPA's implementation decisions classifying areas for setting attainment dates until EPA takes final action on a SIP ... or triggers sanctions ... [after] a state fails to submit a SIP." EPA Pet. at 19. The section to which the EPA refers states as follows: "The Administrator shall publish a notice in the Federal Register announcing each [attainment or nonattainment] classification.... Such classification ... shall not be subject to judicial review until the Administrator takes final action under [the statutes the EPA cites in its petition]." That is, the EPA's decision to classify a particular area as attainment or nonattainment is not subject to review merely because the EPA published that decision in the Federal Register. Neither this section nor the analogous § 7511(a)(3), to which the EPA also cites, prevents a court from deciding, prior to the classification of a particular area, whether the agency has validly promulgated a revised standard.

The EPA also argues that the statements in its preamble regarding implementation are not "ripe for review," a point which it raised in a single sentence in its original brief to this court. EPA Pet. at 19; EPA Ozone Brief at 74. The question whether Subpart 2 prevents the EPA from designating an area as nonattainment under its revised ozone standard or from implementing that designation except in conformity with Subpart 2 is a pure question of law, the resolution of which would not benefit from a more concrete setting. As the agency's action is undoubtedly final, the question is fit for review. See Rio Grande Pipeline Co. v. FERC, 178 F.3d 533, 540-41 (D.C. Cir. 1999).

B. Subpart 2 and the EPA's Authority to Enforce a Revised Ozone Standard

The EPA's arguments in its petition for rehearing do not convince us that we erred in rejecting the EPA's contention that "the reference to § 107(d) in § 181(a)(1) relates only to designations made under § 107(d)(4)," 175 F.3d at 1050, and in holding instead that " § 181(a) clearly encompasses nonattainment designations made under all subsections of § 107(d)." Id. Indeed, we note that the EPA has abandoned its original position, arguing now that the "most logical reading" of § 181(a) is that the reference to § 107(d) includes §§ 107(d)(1)(C) and 107(d)(4). EPA Pet. at 24. We find this new reading no more persuasive than the old. As the EPA notes, all five Subparts of the Clean Air Act providing requirements for nonattainment areas begin with a reference to § 107(d). See 42 U.S.C. §§ 7502(a)(1)(A), 7511(a)(1), 7512(a)(1), 7513(a), 7514(a). It is by no means clear, however, that the references to § 107(d) in Subparts 1 and 3 through 5 include only designations made under §§ 107(d)(1)(C) and (d)(4). Not only does the EPA never argue that they are so limited, but on its theory the reference to § 107(d) in Subpart 1 also encompasses

designations made under § 107(d)(1)(A). EPA Pet. at 25. Accordingly, we reject the EPA's new interpretation of § 181(a), for it is contrary to "the normal rule of statutory construction that identical words used in different parts of the same act are intended to have the same meaning." Gustafson v. Alloyd Co., 513 U.S. 561, 570, 131 L. Ed. 2d 1, 115 S. Ct. 1061 (1995).

Still, the EPA does raise two points relating to Subpart 2 which lead us to grant the EPA's petition for rehearing in part and to make the following revisions to our opinion.

The EPA correctly points out that we erroneously treated the attainment dates in the table in Subpart 2 as representing the Congress's judgment about what is "as expeditiously as practicable" in reducing the level of ozone in an area; in fact, those dates represent what the Congress set as outer limits. See 42 U.S.C. § 7511(a)(1) ("For each area classified under this subsection, the primary standard attainment date for ozone shall be as expeditiously as practicable but not later than the date provided in table 1"). EPA Pet. at 25 n.35. Accordingly, we grant the EPA's petition for rehearing to the extent of deleting the final three sentences of Part III.A.3, see 175 F.3d at 1051, and substituting for them the following sentence:

> Therefore, we conclude that Subpart 2 erects no bar to the EPA's requiring compliance with a revised secondary ozone NAAQS "as expeditiously as practicable."

The EPA also contends that the conclusion to Part III.A.2, see id. at 1050 ("the EPA must enforce any revised primary ozone NAAQS under Subpart 2"), conflicts with our description of that same conclusion at the end of the opinion,

see id. at 1057 (revised ozone NAAQS "cannot be enforced by virtue of [Subpart 2]"). We agree that the two sentences are in tension. To clarify the matter, we grant the EPA's petition for rehearing to the extent of making the following two revisions to our original opinion. First, we replace the final paragraph of Part III.A.2, see id. at 1050, with the following:

> In sum, because the reference to § 107(d) in § 181(a)(1) includes the designation of an area as nonattainment for ozone under a revised ozone NAAQS, that is, under § 107(d)(1), the EPA can enforce a revised primary ozone NAAQS only in conformity with Subpart 2.

Second, we replace the second sentence of the Conclusion, see id. at 1057, with the following:

> We do not vacate the new ozone standards because the parties have not shown that the standard is likely to engender costly compliance activities in light of our determination that it can be enforced only in conformity with Subpart 2.

As with the $PM_{2.5}$ NAAQS, our decision not to vacate the ozone NAAQS "is without prejudice to the ability of any party to apply for vacatur in the future, should circumstances develop in which the presence of this standard threatens a more imminent harm." American Trucking Ass'ns, Inc. v. EPA, No. 97-1440 (D.C. Cir. Jun. 18, 1999).

III. Beneficent Health Effects

The arguments in the EPA's petition for rehearing give us no reason to doubt the correctness of our conclusion that "all identifiable effects," as used in CAA § 108(a)(2), "on its face ... includes beneficent effects." 175 F.3d at 1051. Nor do those

arguments warrant consideration in a published opinion. We express no opinion, of course, upon the effect, if any, that studies showing the beneficial effects of tropospheric ozone, see id. at 1052, might have upon any ozone standard the EPA may promulgate on remand.

IV. Conclusion

For the above reasons, the EPA's petition for rehearing is

Granted in part and denied in part.

TATEL, Circuit Judge, concurring in part and dissenting in part:

I concur in the partial grant of rehearing with respect to enforcement of the revised ozone standard because, as modified, the opinion now leaves open the possibility that EPA can enforce the new ozone NAAQS without conflicting with Subpart 2's classifications and attainment dates. While I too think that we have jurisdiction to decide the enforcement issue, I write separately because I do not entirely agree with the rationale of the modified panel opinion.

The panel understood EPA's original position to be that, although Subpart 2 limited the Agency's enforcement of the pre-existing one-hour 0.12 ppm ozone NAAQS, it "has no effect upon the EPA's authority to enforce a revised primary ozone NAAQS." American Trucking Ass'ns v. EPA, 175 F.3d 1027, 1048 ("ATA"). That interpretation, the panel held, not only conflicted with section 7511(a)(1)'s text and legislative history, see id., 175 F.3d at 1048-49, but by leaving the Agency free to "require areas to comply either more quickly or with a more stringent ozone NAAQS," it defied Congress's clear intent

to "extend[ ] the time for nonattainment areas to comply with the 0.12 ppm ozone NAAQS." Id. at 1049.

Having rejected the Agency's interpretation, the panel went on to agree with petitioners that Subpart 2 embodies "a comprehensive enforcement scheme" that "specifically provides classifications and dates for all areas designated nonattainment under any ozone NAAQS." Id. at 1049, 1048 (emphasis added). This holding meant that areas not covered by Table 1 in Subpart 2--i.e. those with one-hour ozone design values below 0.121 ppm--were completely exempt from any ozone regulation whatsoever. Although the panel acknowledged that EPA must continue to revise the NAAQS, see id. at 1047, it concluded that the revised standard "cannot be enforced by virtue of [Subpart 2]." Id. at 1057.

After reading EPA's petition for rehearing and the various responses, I no longer believe that it was "the unambiguously expressed intent of Congress" to command EPA to revise the ozone standards, while denying it the power to enforce them. Chevron U.S.A., Inc. v. NRDC, 467 U.S. 837, 842, 81 L. Ed. 2d 694, 104 S. Ct. 2778. Table 1 specifically provides classifications and attainment dates for some areas, but as EPA points out, "it establishes no attainment dates or classifications for nonattainment areas with 'design values' lower than 0.121 ppm." EPA Pet. Reh'g at 22-23. As the Agency argues, it is thus difficult to see how Subpart 2 can "specifically provide[ ]" attainment dates for areas that are designated nonattainment under the new standard but are not covered by Table 1. See id. at 22-24. This gap in Table 1 makes it at least ambiguous whether Subpart 2 "specifically provides" classifications and attainment dates for all areas exceeding the revised 0.08 ppm ozone NAAQS.

EPA also points out that treating Subpart 2 as the exclusive enforcement scheme for all areas leads to "irrational and contradictory consequences." Id. at 23. Subpart 2 provides that "each area designated nonattainment for ozone pursuant to section 7407(d) of this title shall be classified ... under table 1, by operation of law...." 42 U.S.C. § 7511(a)(1). Even if the panel is correct that the reference to section 7407(d) includes designations under a revised NAAQS pursuant to section 7407(d)(1)(A), see Slip Op. on Reh'g at 6-7, the fact remains that the only "nonattainment areas for which classifications [and attainment dates] are specifically provided under" Table 1 are those having one-hour ozone design values of 0.121 ppm or greater. ATA, 175 F.3d at 1048 (quoting 42 U.S.C. § 7502(a)(1)(C), (a)(2)(D)). Classifying other areas "under table 1, by operation of law" is thus impossible or, at the very least, not "unambiguously" "specifically provided for." And although, as the panel noted, "a title [of a statute or section] cannot be allowed to create an ambiguity in the first place," id., at 1050, the ambiguity in this statute--Can section 7511(a)(1) be applied literally to areas that have attained the old standard but fail to meet the new one?-- appears in the text of Subpart 2 itself.

Moreover, EPA has offered a plausible interpretation of the statute that reasonably reconciles the provisions of Subparts 1 and 2. In its Petition for Rehearing, the Agency states that "Subpart 2 addresses continued nonattainment for the primary one-hour ozone standard," EPA Pet. Reh'g at 20, while Subpart 1 provides implementation authority for the new ozone standard in areas that have already attained the old one, see id. at 20-22. The Agency articulated this same reading of the statute in its original brief, stating that "consistent with Congress' intent, EPA interpreted the Subpart 2 provisions to remain in place for areas not attaining the one-hour standard, and concluded the one-hour standard should continue to apply until EPA determines that an area attains that standard, thus facilitating

continued implementation of the relevant Subpart 2 measures." EPA Ozone Brief at 72. The final rulemaking--the Agency action we are reviewing here--is even clearer about the relationship between Subparts 1 and 2:

> At the time of the proposal of the new O_3 standard, EPA had proposed an interpretation of the Act in the proposed Interim Implementation Policy (61 FR 65764, December 13, 1996) under which the provisions of sub-part 2 of part D of Title I of the Act would not apply to existing O_3 nonattainment areas once a new O_3 standard becomes effective.
>
> In light of comments received regarding the interpretation proposed in the Interim Implementation Policy, EPA has reconsidered that interpretation and now believes that the Act should be interpreted such that the provisions of subpart 2 continue to apply to O_3 nonattainment areas for purposes of achieving attainment of the current 1-hour standard. As a consequence, the provisions of subpart 2, which govern implementation of the 1-hour O_3 standard in O_3 nonattainment areas, will continue to apply as a matter of law for so long as an area is not attaining the 1-hour standard. Once an area attains that standard, however, the purpose of the provisions of subpart 2 will have been achieved and those provisions will no longer apply. However, the provisions of subpart 1 of part D of Title I of the Act would apply to the implementation of the new 8-hour O_3 standards.
>
> To facilitate the implementation of those provisions and to ensure a smooth transition to the implementation of the new 8-hour standard, the 1-hour standard should remain applicable to areas that are not

> attaining the 1-hour standard. Therefore, the 1-hour standard will remain applicable to an area until EPA determines that it has attained the 1-hour standard, at which point the 1-hour standard will no longer apply to that area.

62 Fed. Reg. 38,873 (1997), cited in EPA Ozone Brief at 72. See also 40 C.F.R. § 50.9(b) (continuing to apply the one-hour 0.12 ppm standard until it is attained).

To be sure, EPA's original brief did seem to advance the position the panel rejected--that in enforcing the new ozone NAAQS, the Agency is free to disregard altogether Subpart 2's timetable. See EPA Ozone Brief at 69-71. Given the clarity of the final rule, however, I no longer believe that EPA actually intended to argue that it could subvert Subpart 2's schedule in enforcing the new ozone NAAQS. When EPA's lawyers said in the original brief that Subpart 2 is inapplicable to nonattainment areas under the new ozone standard, I assume they must have meant that even under the new standard, Subpart 2 continues to apply to areas covered by Table 1--not that Subpart 2 no longer applies at all. Viewed this way, EPA's original brief and its petition for rehearing are perfectly consistent with the final rule: all three interpret the Act to mean that Subpart 2 still applies to an area until it attains the one-hour 0.12 ppm standard. This interpretation puts to rest the panel's concern that Subpart 2's attainment schedule "would have been stillborn had the EPA revised the ozone NAAQS immediately after the Congress enacted the 1990 amendments." ATA, 175 F.3d at 1050.

The Agency's petition also explains the practical consequences of its interpretation of Subpart 2. Although EPA may not enforce a stricter ozone standard in Los Angeles earlier than the year 2012, see id., at 1049, the Agency need not wait for Los Angeles to achieve the old standard before requiring the

rest of the country to move toward cleaner air. Cf. EPA Pet. Reh'g at 25 (suggesting that Los Angeles "is the only area of the nation" where compliance with the 0.08 ppm NAAQS under Subpart 1 could possibly be required at the same time as compliance with the 0.12 ppm NAAQS under Subpart 2). In other words, Table 1 functions as a safe harbor for areas like Los Angeles whose ozone levels exceed 0.121 ppm.

To sum up, the panel rejected what it was led to believe was EPA's view that Subpart 2 applied only to nonattainment areas under the old standard but no longer applies at all under the new standard. The panel held instead that Subpart 2 applies to all nonattainment areas under any standard, foreclosing implementation of a new standard in any area not covered by Table 1. EPA has now clarified its interpretation of the Act. A middle ground originally articulated in its final rulemaking, the Agency's position harmonizes its general enforcement authority under Subpart 1 with the specific provisions of Subpart 2. Subpart 2 continues to govern those areas covered by Table 1, just as it did under the old NAAQS, but in areas that have attained the old standard, nothing precludes enforcement of the new standard under Subpart 1.

I would have granted rehearing and held that the Agency's position represents a reasonable interpretation of an ambiguous statute. See Chevron, 467 U.S. at 844 (upholding EPA's construction of NAAQS attainment provisions of the Clean Air Act, stating that "a court may not substitute its own construction of a statutory provision for a reasonable interpretation made by the administrator of an agency."). I nonetheless concur in the judgment because the revised opinion's statement that "the EPA can enforce a revised primary ozone NAAQS only in conformity with Subpart 2" leaves open the possibility that the new ozone standard can be implemented in areas that have attained the old standard.

For the reasons set forth in my statement dissenting from the denial of rehearing en banc, I respectfully dissent from the denial of rehearing as to Part I of the panel opinion ("Delegation").

No. 97-1440

AMERICAN TRUCKING ASSOCIATIONS, ET AL.,
Petitioners

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
Intervenors

Consolidated with
Nos. 97-1546, 97-1548, 97-1551, 97-1552, 97-1553, 97-1555, 97-1559, 97-1561, 97-1562, 97-1565, 97-1567, 97-1571, 97-1573, 97-1574, 97-1576, 97-1578, 97-1579, 97-1583, 97-1583, 97-1586, 97-1587, 97-1588, 97-1592, 97-1594, 97-1596, 97-1597, 97-1598

No. 97-1441

AMERICAN TRUCKING ASSOCIATIONS, ET AL.,
Petitioners

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
Intervenors

Consolidated with

Nos. 97-1502, 97-1505, 97-1508, 97-1509, 97-1510, 97-1512, 97-1513, 97-1514, 97-1518, 97-1519, 97-1526, 97-1531, 97-1539, 97-1566, 97-1568, 97-1570, 97-1572, 97-1575, 97-1584, 97-1589, 97-1591, 97-1595, 97-1619

United States Court of Appeals,
District of Columbia Circuit

Decided October 29, 1999.

Before: EDWARDS, Chief Judge; WALD, SILBERMAN, WILLIAMS, GINSBURG, SENTELLE, HENDERSON, RANDOLPH, ROGERS, TATEL and GARLAND, Circuit Judges. Circuit Judges WALD and HENDERSON did not participate in this matter. Chief Judge EDWARDS and Circuit Judges SILBERMAN, Rogers, Tatel, AND Garland WOULD GRANT THE SUGGESTION. SILBERMAN, Circuit Judge, dissenting from the denial of rehearing en banc. TATEL, Circuit Judge, with whom EDWARDS, Chief Judge, and GARLAND, Circuit Judge, join, dissenting from the denial of rehearing en banc.

Respondent EPA's Suggestion for Rehearing En Banc and the responses thereto have been circulated to the full court. The taking of a vote was requested. Thereafter, a majority of the judges of the court in regular active service did not vote in favor of the suggestion. Upon consideration of the foregoing, it is

ORDERED that the suggestion be denied.

Per Curiam

Circuit Judges WALD and HENDERSON did not participate in this matter.

Chief Judge EDWARDS and Circuit Judges SILBERMAN, Rogers, Tatel, AND Garland WOULD GRANT THE SUGGESTION.

SILBERMAN, Circuit Judge, dissenting from the denial of rehearing en banc:

The panel's reliance on the nondelegation doctrine to reject EPA's interpretation of section 109 of the Clean Air Act is rather ingenious, but I regret that it seems to me to be fundamentally unsound. I do not think that doctrine can be employed to force an agency to narrow a broad legislative delegation from Congress.

The doctrine, as Judge Tatel in dissent pointed out, American Trucking Ass'n v. EPA, 175 F.3d 1027, 1057-58 (D.C. Cir. 1999) ("ATA") (Tatel, J., dissenting in part), is at this stage of constitutional "evolution" not in particularly robust health. Justice Rehnquist heroically attempted to inject vitality into the doctrine in his powerful concurrence in the Benzene case, see Industrial Union Dep't, AFL-CIO v. American Petroleum Inst., 448 U.S. 607, 671, 65 L. Ed. 2d 1010, 100 S. Ct. 2844 (1980). But, sad to say, his view is not shared by a majority of the Court which has acknowledged only a theoretical limitation on the scope of congressional delegations to the executive branch. See Mistretta v. United States, 488 U.S. 361, 416, 102 L. Ed. 2d 714, 109 S. Ct. 647 (1989) (Scalia, J., dissenting) ("What legislated standard, one must wonder, can possibly be too vague to survive judicial scrutiny, when we have repeatedly upheld, in various contexts, a 'public interest' standard?").

To be sure, the plurality in the Benzene case ostensibly relied on the doctrine to support its interpretation of the Occupational Safety and Health Act. See Benzene, 448 U.S.

607 at 645-46, 100 S. Ct. 2844, 65 L. Ed. 2d 1010. But a careful reading of the plurality opinion (not, of course, an opinion of the Court, which would bind us) reveals that the doctrine was only a makeweight, tossed into the analysis, in light of Justice Rehnquist's concurrence, to help justify the result. The plurality, disturbed at the seemingly draconian impact of the Secretary of Labor's standard as applied to several industries, analytically conflated the scope of the Secretary's discretion--the legitimate concern of the nondelegation doctrine--with the regulatory consequences of his interpretation of the statute. Id. at 645. The latter concern is not really germane to the doctrine; indeed, the Secretary was actually claiming he had less discretion than the plurality thought he had. Accordingly, the Benzene plurality opinion gives only lip service to the nondelegation doctrine; the boundaries limiting the scope of congressional delegation to the executive branch remain only dimly perceivable. I agree with Judge Tatel that the terminology of this section of the Clean Air Act does not come so close to those boundaries to raise a serious constitutional problem.

If it did, and we were faced with two conflicting interpretations of the statute--both plausible--I have no doubt that a constitutionally dubious agency interpretation could be rejected even in a post-Chevron era. The majority questions that proposition-and confuses the issue--by stating that "the approach of the Benzene case ... has given way to the approach of Chevron." Slip Op. on Reh'g at 4. The Supreme Court's opinion in Rust v. Sullivan, 500 U.S. 173, 191, 114 L. Ed. 2d 233, 111 S. Ct. 1759 (1991), is to the contrary. See also infra at 1 (Tatel, J., dissenting from denial of rehearing en banc) (citing Mistretta, 488 U.S. at 373 n.7). In other words, the constitutional avoidance canon trumps Chevron deference. But that principle is not relevant to this case. Even assuming the statute was problematic, the panel was not faced with two competing constructions, one of which might be thought to

avoid constitutional difficulty. Indeed, the panel concluded that there are no intelligible principles "apparent from the statute" that brought EPA's discretion within constitutionally acceptable limits. ATA, 175 F.3d at 1034. If the panel believed that was so, it should have held the statute unconstitutional. Instead the panel, purporting to rely on Chevron, remanded to EPA directing that agency to come up with an artificially narrow interpretation with various suggestions offered by the panel to accomplish that end.[1] Id. at 1038-40. By so doing, I believe the panel undermines the purpose of the nondelegation doctrine.

That purpose is, of course, to ensure that Congress makes the crucial policy choices that are carried into law. The ability to make those policy choices (even if only at a broad level of generality) is what is meant by legislative power. See U.S. CONST. art. I, § 1 ("All legislative Powers herein granted shall be vested in a Congress of the United States."). It hardly serves--indeed, it contravenes--that purpose to demand that EPA in effect draft a different, narrower version of the Clean Air Act.[2] Under that view Congress would be able to delegate

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[1]Like the plurality opinion in Benzene, these suggestions seem more directed to encouraging wiser policy choices than interpreting the statute at issue.

[2]The panel acknowledges this purpose but, relying on an old district court opinion as primary support, claims that its approach preserves two other rationales of the doctrine, limiting the ability of agencies to exercise delegated authority arbitrarily and providing meaningful standards for judicial review. See ATA, 175 F.3d at 1038 (citing Amalgamated Meat Cutters v. Connally, 337 F. Supp. 737, 758-59 (D.D.C. 1971). But these "purposes" are obviously derivative of the doctrine's primary function of ensuring that Congress makes key policy decisions. It is, after all, only this so-called "third" purpose, see id., that

almost limitless policymaking authority to an agency, so long as the agency provides and consistently applies an "intelligible principle."[3]

That is not to say that EPA is totally free to exercise its authority at any point on the discretionary continuum that Congress delegated to it in the Clean Air Act. The Administrative Procedure Act's arbitrary and capricious standard also limits the agency's actions. As we have observed, the broader the substantive statutory delegation the more likely that the agency's policy choices will be confined by the APA, rather than the substantive statute. See National Ass'n of Regulatory Comm'rs v. ICC, 309 U.S. App. D.C. 325, 41 F.3d 721, 727 (D.C. Cir. 1994) ("Whether an agency action is to be judged as reasonable, in accordance with the APA's general arbitrary and capricious standard, or whether it is to be examined as a permissible interpretation of the statute vel non depends, at least theoretically, on the scope of the specific congressional delegation implicated."). In that regard, I am quite uncertain whether EPA's regulatory choice meets that test. Judge Tatel's emphasis on the agency's extensive procedures does not appear to me to answer the question. It would not matter whether the agency "actually adhered to a disciplined decisionmaking process," ATA, 175 F.3d at 1059, if its final product was unreasonable. If we were to rehear the case, I would focus on that issue.

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has any connection to the doctrine's constitutional source.

[3]It is true that we used a similar approach in Industrial Union, UAW v. OSHA ("Lockout-Tagout I"), 291 U.S. App. D.C. 51, 938 F.2d 1310 (D.C. Cir. 1991). Although one could distinguish that case, I think it rests on a similarly flawed analysis of the doctrine.

Doctrine aside, then, what is the practical difference between my approach and the panel's? The answer, I think, is that the panel engages--and by retaining jurisdiction promises to continue to engage, see id., 175 F.3d at 1057--in a more searching review than the arbitrary and capricious standard would permit. By treating this case as a statutory interpretation question laden with constitutional implications the panel implicitly asserts a greater role for a reviewing court than is justified.

****

I respectfully dissent from our denial of rehearing en banc.

TATEL, Circuit Judge, with whom EDWARDS, Chief Judge, and GARLAND, Circuit Judge, join, dissenting from the denial of rehearing en banc:

In explaining why they remain convinced that the Clean Air Act contains an unconstitutional delegation of legislative power, my colleagues merely repeat that EPA has failed to articulate a sufficiently limiting principle. See Slip Op. on Reh'g at 1-3. They then launch into a discussion of the proper remedy once a court encounters a problematic legislative delegation and conclude that "the approach of the Benzene case ... has given way to the approach of Chevron." Slip Op. on Reh'g at 4. But see supra at 2-3 (Silberman, J., dissenting from the denial of rehearing en banc); Mistretta v. United States, 488 U.S. 361, 373 n.7, 102 L. Ed. 2d 714, 109 S. Ct. 647 (1989) ("In recent years, our application of the nondelegation doctrine principally has been limited to the interpretation of statutory texts, and more particularly, to giving narrow constructions to statutory delegations that might otherwise be thought to be unconstitutional. See, e.g., [the Benzene case.]").

The issues discussed by my colleagues have no relevance to the constitutional question we face. As I pointed out in my dissent, the Clean Air Act's requirement that EPA set air quality standards "requisite to protect the public health" with "an adequate margin of safety" based on criteria that "accurately reflect the latest scientific knowledge" is far more specific than the sweeping statutory delegations consistently upheld by the Supreme Court for more than sixty years. 42 U.S.C. § 7409(b)(1), § 7408(a)(2). See, e.g., National Broadcasting Co. v. United States, 319 U.S. 190, 225-26, 87 L. Ed. 1344, 63 S. Ct. 997 (1943) (upholding delegation to the FCC to regulate broadcast licensing in the "public interest"); American Trucking Ass'n, Inc. v. EPA, 175 F.3d 1027, 1057-58 (D.C. Cir. 1999) (Tatel, J., dissenting in part) (collecting cases). In language particularly relevant to the highly technical and scientific process of setting national ambient air quality standards, the Supreme Court in Mistretta said this about the nondelegation doctrine: "Our jurisprudence has been driven by a practical understanding that in our increasingly complex society, replete with ever changing and more technical problems, Congress simply cannot do its job absent an ability to delegate power under broad general directives." 488 U.S. at 372. Such extensive and unambiguous Supreme Court precedent is more than enough to sustain the Clean Air Act's delegation of authority to the EPA. For purposes of constitutional analysis, we thus have no need to require that EPA state "a far more determinate basis for decision" beyond the intelligible principle Congress provided in the Clean Air Act. ATA, 175 F.3d at 1037. Nor have we any reason to consider what remedies might be available were we faced with a statute that failed to meet constitutional standards. Unless petitioners can persuade the Supreme Court to return to the days of Schechter Poultry, this "inferior" court has no authority to demand anything more from either EPA or Congress.

Neither American Lung Ass'n v. EPA, 328 U.S. App. D.C. 232, 134 F.3d 388 (D.C. Cir. 1998), nor the Benzene case, both heavily relied upon by petitioners in their opposition to the suggestion for rehearing en banc, supports the panel's opinion. No one in American Lung doubted the constitutionality of section 109's directive that EPA establish NAAQS "requisite to protect the public health." Applying the familiar arbitrary and capricious standard, we held only that the Agency, in setting the sulfur dioxide NAAQS, had failed adequately to explain its application of section 109. See American Lung, 134 F.3d at 392. The Benzene plurality stated nothing more than that section 3(8) of the OSHA statute implicitly requires the Agency to make a threshold finding that a substance to be regulated causes "significant risks of harm." 448 U.S. at 641. In support of this inference, the plurality pointed to the statute's structure, context, and legislative history, see id. at 642-45, adding that a broader reading "might" amount to an unconstitutional delegation, id. at 646. The conclusion that Congress may constitutionally delegate authority to OSHA to regulate "significant" risks of harm hardly supports the panel's holding that Congress may not constitutionally delegate authority to EPA to issue NAAQS "requisite" to protect the public health--a standard more restrictive than the one the Supreme Court derived and approved in the Benzene case.

The panel's nondelegation holding plainly "involves a question of exceptional importance" warranting en banc review. Fed. R. App. P. 35(a). Not only did the panel depart from a half century of Supreme Court separation-of-powers jurisprudence, but in doing so, it stripped the Environmental Protection Agency of much of its ability to implement the Clean Air Act, this nation's primary means of protecting the safety of the air breathed by hundreds of millions of people. See H.R. REP. NO. 101-490, pt. 1, at 144-45 (1990).

No. 97-1440

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No. 97-1441

AMERICAN TRUCKING ASSOCIATIONS, ET AL.,
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v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
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United States Court of Appeals,
District of Columbia Circuit

Decided October 29, 1999.

Before: EDWARDS, Chief Judge; WALD, SILBERMAN, WILLIAMS, GINSBURG, SENTELLE, HENDERSON, RANDOLPH, ROGERS, TATEL and GARLAND, Circuit Judges. Circuit Judges WALD and HENDERSON did not participate in this matter.

Upon consideration of the petitions for rehearing en banc of intervenors-respondents New Jersey and Massachusetts in Nos. 97-1440 and 97-1441, Citizens for Balanced Transportation, et al. in No. 97-1440 and the American Lung Association in Nos. 97-1440 and 97-1441, and the absence of a request by any member of the court for a vote, it is

ORDERED that the petitions be denied.

STATUTORY PROVISIONS

42 U.S.C. § 7407. Air quality control regions

(d) Designations.

(1) Designations generally.

(A) Submission by Governors of initial designations following promulgation of new or revised standards.

By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 109 [42 USCS § 7409], the Governor of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) submit to the Administrator a list of all areas (or portions thereof) in the State, designating as--

(i) nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant,

(ii) attainment, any area (other than an area identified in clause (i)) that meets the national primary or secondary ambient air quality standard for the pollutant, or

(iii) unclassifiable, any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

The Administrator may not require the Governor to submit the required list sooner than 120 days after promulgating a new or revised national ambient air quality standard.

(B) Promulgation by EPA of designations

(i) Upon promulgation or revision of a national ambient air quality standard, the Administrator shall promulgate the designations of all areas (or portions thereof) submitted under subparagraph (A) as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations.

(ii) In making the promulgations required under clause (i), the Administrator may make such modifications as the Administrator deems necessary to the designations of the areas (or portions thereof) submitted under subparagraph (A) (including to the boundaries of such areas or portions thereof). Whenever the Administrator shall notify the State and provide such State with an opportunity to demonstrate why any proposed modification is inappropriate. The Administrator shall give such notification no later than 120 days before the date the Administrator promulgates the designation, including any modification thereto. If the Governor fails to submit the list in whole or in part, as required under subparagraph (A), the Administrator shall promulgate the designation that the Administrator deems appropriate for any area (or portion thereof) not designated by the State.

(iii) If the Governor of any State, on the Governor's own motion, under subparagraph (A), submits a list of areas (or

portions thereof) in the State designated as nonattainment, attainment, or unclassifiable, the Administrator shall act on such designations in accordance with the procedures under paragraph (3) (relating to redesignation).

(iv) A designation for an area (or portion thereof) made pursuant to this subsection shall remain in effect until the area (or portion thereof) is redesignated pursuant to paragraph (3) or (4).

(C) Designations by operation of law

(i) Any area designated with respect to any air pollutant under the provisions of paragraph (1) (A), (B), or (C) of this subsection (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990 [enacted Nov. 15, 1990]) is designated, by operation of law, as a nonattainment area for such pollutant within the meaning of subparagraph (A)(i).

(ii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(E) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990 [enacted Nov. 15, 1990]) is designated by operation of law, as an attainment area for such pollutant within the meaning of subparagraph (A)(ii).

(iii) Any area designated with respect to any air pollutant under theprovisions of paragraph (1)(D) (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990 [enacted Nov. 15, 1990]) is designated, by operation of law, as an unclassifiable area for such pollutant within the meaning of subparagraph (A)(iii).

(2) Publication of designations and redesignations

(A) The Administrator shall publish a notice in the Federal Register promulgating any designation under paragraph (1) or (5), or announcing any designation under paragraph (4), or promulgating any redesignation under paragraph (3).

(B) Promulgation or announcement of a designation under paragraph (1), (4)or (5) shall not be subject to the provisions of sections 553 through 557 of title 5 of the United States Code (relating to notice and comment), except nothing herein shall be construed as precluding such public notice and comment whenever possible.

(3) Redesignation

(A) Subject to the requirements of subparagraph (E), and on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate, the Administrator may at any time notify the Governor of any State that available information indicates that the designation of any area or portion of an area within the State or interstate area should be revised. In issuing such notification, which shall be public, to the Governor, the Administrator shall provide such information as the Administrator may have available explaining the basis for the notice.

(B) No later than 120 days after receiving a notification under subparagraph (A), the Governor shall submit to the Administrator such redesignation, if any, of the appropriate area (or areas) or portion thereof within the State or interstate area, as the Governor considers appropriate.

(C) No later than 120 days after the date described in subparagraph (B)(or paragraph (1)(B)(iii)), the Administrator shall promulgate the redesignation, if any, of the area or portion

thereof, submitted by the Governor in accordance with subparagraph (B), making such modifications as the Administrator may deem necessary, in the same manner and under the same procedure as is applicable under clause (ii) of paragraph (1)(B), except that the phrase "60 days" shall be substituted for the phrase "120 days" in that clause. If the Governor does not submit, in accordance with subparagraph (B), a redesignation for an area (or portion thereof) identified by the Administrator under subparagraph (A), the Administrator shall promulgate such redesignation, if any, that the Administrator deems appropriate.

(D) The Governor of any State may, on the Governor's own motion, submit to the Administrator a revised designation of any area or portion thereof within the State. Within 18 months of receipt of a complete State redesignation submittal, the Administrator shall approve or deny such redesignation. The submission of a redesignation by a Governor shall not affect the effectiveness or enforceability of the applicable implementation plan for the State.

(E) The Administrator may not promulgate a redesignation of a nonattainment area (or portion thereof) to attainment unless--

(i) the Administrator determines that the area has attained the national ambient air quality standard;

(ii) the Administrator has fully approved the applicable implementation plan for the area under section 110(k) [42 USCS § 7410(k)];

(iii) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the

applicable implementation plan and applicable Federal air pollutant control regulations and other permanent and enforceable reductions;

(iv) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A [42 USCS § 7505a]; and

(v) the State containing such area has met all requirements applicable to the area under section 110 and part D [42 USCS § 7410 and §§ 7501 et seq.].

(F) The Administrator shall not promulgate any redesignation of any area (or portion thereof) from nonattainment to unclassifiable.

(4) Nonattainment designations for ozone, carbon monoxide and particulate matter (PM-10)

(A) Ozone and carbon monoxide

(i) Within 120 days after the date of the enactment of the Clean Air Act Amendments of 1990 [enacted Nov. 15, 1990], each Governor of each State shall submit to the Administrator a list that designates, affirms or reaffirms the designation of, or redesignates (as the case may be), all areas (or portions thereof) of the Governor's State as attainment, nonattainment, or unclassifiable with respect to the national ambient air quality standards for ozone and carbon monoxide.

(ii) No later than 120 days after the date the Governor is required to submit the list of areas (or portions thereof) required under clause (i) of this subparagraph, the Administrator shall promulgate such designations, making such modifications as the Administrator may deem necessary,

in the same manner, and under the same procedure, as is applicable under clause (ii) of paragraph (1)(B), except that the phrase "60 days" shall be substituted for the phrase "120 days" in that clause. If the Governor does not submit, in accordance with clause (i) of this subparagraph, a designation for an area (or portion thereof), the Administrator shall promulgate the designation that the Administrator deems appropriate.

(iii) No nonattainment area may be redesignated as an attainment area under this subparagraph.

42 U.S.C. § 7408 Air quality criteria and control techniques

(a) Air pollutant list; publication and revision by Administrator; issuance of air quality criteria for air pollutants.

(1) For the purpose of establishing national primary and secondary ambient air quality standards, the Administrator shall within 30 days after the date of enactment of the Clean Air Amendments of 1970 [enacted Dec. 31, 1970] publish, and shall from time to time thereafter revise, a list which includes each air pollutant--

(A) emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare;

(B) the presence of which in the ambient air results from numerous or diverse mobile or stationary sources; and

(C) for which air quality criteria had not been issued before the date of enactment of the Clean Air Amendments of 1970 [enacted Dec. 31, 1970], but for which he plans to issue air quality criteria under this section.

(2) The Administrator shall issue air quality criteria for an air pollutant within 12 months after he has included such pollutant in a list under paragraph (1). Air quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities. The criteria for an air pollutant, to the extent practicable, shall include information on--

(A) those variable factors (including atmospheric conditions) which of themselves or in combination with other factors may alter the effects on public health or welfare of such air pollutant:

(B) the types of air pollutants which, when present in the atmosphere, may interact with such pollutant to produce an adverse effect on public health or welfare; and

(C) any known or anticipated adverse effects on welfare.

42 U.S.C. § 7409. National primary and secondary ambient air quality standards

(a) Promulgation.

(1) The Administrator--

(A) within 30 days after the date of enactment of the Clean Air Amendments of 1970 [enacted Dec. 31, 1970], shall publish proposed regulations prescribing a national primary ambient air quality standard and a national secondary ambient air quality standard for each air pollutant for which air quality criteria have been issued prior to such date of enactment; and

(B) after a reasonable time for interested persons to submit written comments thereon (but no later than 90 days after the initial publication of such proposed standards) shall be regulation promulgate such proposed national primary and secondary ambient air quality standards with such modifications as he deems appropriate.

(2) With respect to any air pollutant for which air quality criteria are issued after the date of enactment of the Clean Air Amendments of 1970 [enacted Dec. 31, 1970], the Administrator shall publish, simultaneously with the issuance of such criteria and information, proposed national primary and secondary ambient air quality standards for any such pollutant. The procedure provided for in paragraph (1)(B) of this subsection shall apply to the promulgation of such standards.

(b) Protection of public health and welfare.

(1) National primary ambient air quality standards, prescribed under subsection (a) shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health. Such primary standards may be revised in the same manner as promulgated.

(2) Any national secondary ambient air quality standard prescribed under subsection (a) shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. Such secondary standards may be revised in the same manner as promulgated.

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(d) Review and revision of criteria and standards; independent scientific review committee; appointment; advisory functions.

(1) Not later than December 31, 1980, and at five-year intervals thereafter, the Administrator shall complete a thorough review of the criteria published under section 108 [*42 USCS § 7408]* and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate in accordance with section 108 [*42 USCS § 7408]* and subsection (b) of this section. The Administrator may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.

(2) (A) The Administrator shall appoint an independent scientific review committee composed of seven members including at least one member of the National Academy of Sciences, one physician, and one person representing State air pollution control agencies.

(B) Not later than January 1, 1980, and at five-year intervals thereafter, the committee referred to in subparagraph (A) shall complete a review of the criteria published under section 108 [*42 USCS § 7408]* and the national primary and secondary ambient air quality standards promulgated under this section and shall recommend to the Administrator any new national ambient air quality standards and revisions of existing criteria and standards as may be appropriate under section 108 [*42 USCS § 7408]* and subsection (b) of this section.

(C) Such committee shall also (i) advise the Administrator of areas in which additional knowledge is required to appraise the adequacy and basis of existing, new, or revised national ambient air quality standards, (ii) describe the research efforts

necessary to provide the required information, (iii) advise the Administrator on the relative contribution to air pollution concentrations of natural as well as anthropogenic activity, and (iv) advise the Administrator of any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of such national ambient air quality standards.

§ 7502. Nonattainment plan provisions in general

(a) Classifications and attainment dates.

(1) Classifications.

(A) On or after the date the Administrator promulgates the designation of an area as a nonattainment area pursuant to section 107(d) [*42 USCS § 7407*(d)] with respect to any national ambient air quality standard (or any revised standard, including a revision of any standard in effect on the date of the enactment of the Clean Air Act Amendments of 1990 [enacted Nov. 15, 1990]), the Administrator may classify the area for the purpose of applying an attainment date pursuant to paragraph (2), and for other purposes. In determining the appropriate classification, if any, for a nonattainment area, the Administrator may consider such factors as the severity of nonattainment in such area and the availability and feasibility of the pollution control measures that the Administrator believes may be necessary to provide for attainment of such standard in such area.

(B) The Administrator shall publish a notice in the Federal Register announcing each classification under subparagraph (A), except the Administrator shall provide an opportunity for at least 30 days for written comment. Such classification shall not be subject to the provisions of sections 553 through 557 of title 5 of the United States Code (concerning notice and

comment) and shall not be subject to judicial review until the Administrator takes final action under subsection (k) or (l) of section 110 [*42 USCS § 7410*(k) or (l)] (concerning action on plan submissions) or section 179 [*42 USCS § 7509]* (concerning sanctions) with respect to any plan submissions required by virtue of such classification.

(C) This paragraph shall not apply with respect to nonattainment areas for which classifications are specifically provided under other provisions of this part [*42 USCS § § 7501* et seq.].

(2) Attainment dates for nonattainment areas.

(A) The attainment date for an area designated nonattainment with respect to a national primary ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment under section 107(d) [*42 USCS § 7407*(d)], except that the Administrator may extend the attainment date to the extent the Administrator determines appropriate, for a period no greater than 10 years from the date of designation as nonattainment, considering the severity of nonattainment and the availability and feasibility of pollution control measures.

(B) The attainment date for an area designated nonattainment with respect to a secondary national ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable after the date such area was designated nonattainment under section 107(d) [*42 USCS § 7407*(d)].

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(D) This paragraph shall not apply with respect to nonattainment areas for which attainment dates are specifically provided under other provisions of this part [*42 USCS § § 7501* et seq.].

(b) Schedule for plan submissions.

At the time the Administrator promulgates the designation of an area as nonattainment with respect to a national ambient air quality standard under section 107(d) [*42 USCS § 7407*(d)], the Administrator shall establish a schedule according to which the State containing such area shall submit a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) and section 110(a)(2) [*42 USCS § 7410*(a)(2)]. Such schedule shall at a minimum, include a date or dates, extending no later than 3 years from the date of the nonattainment designation, for the submission of a plan or plan revision (including the plan items) meeting the applicable requirements of subsection (c) and section 110(a)(2) [*42 USCS § 7410*(a)(2)].

42 U.S.C. § 7511. Classifications and attainment dates

(a) Classification and attainment dates for 1989 nonattainment areas.

(1) Each area designated nonattainment for ozone pursuant to section 107(d) [42 USCS § 7407(d)] shall be classified at the time of such designation, under table 1, by operation of law, as a Marginal Area, a Moderate Area, a Serious Area, a Severe Area, or an Extreme Area based on the design value for the area. The design value shall be calculated according to the interpretation methodology issued by the Administrator most recently before the date of the enactment of the Clean Air Act Amendments of 1990. For each area classified under this subsection, the primary standard attainment date for ozone shall

be as expeditiously as practicable but not later than the date provided in table 1.

TABLE 1

Area class	*Design value**	*Primary standard attainment date***
Marginal	0.121 up to 0.138	3 years after November15, 1990
Moderate	0.138 up to 0.160	6 years after November 15, 1990
Serious	0.160 up to 0.180	9 years after November 15, 1990
Severe	0.180 up to 0.280	15 years after November 15, 1990
Extreme	280 and above	20 years after November 15, 1990

*The design value is measured in parts per million (ppm).

**The primary standard attainment date is measured from the date of the enactment of the Clean Air Amendments of 1990.

(2) Notwithstanding table 1, in the case of a severe area with a 1988 ozone design value between 0.190 and 0.280 ppm, the attainment date shall be 17 years (in lieu of 15 years) after the date of the enactment of the Clean Air Amendments of 1990.

(3) At the time of publication of the notice under section 107(d)(4) [42 USCS § 7407(d)(4)] (relating to area designations) for each ozone nonattainment area, the Administrator shall publish a notice announcing the classification of such ozone nonattainment area. The provisions of section 172(a)(1)(B) [42 USCS § 7502(a)(1)(B)] (relating to lack of notice and comment and judicial review) shall apply to such classification.

(4) If an area classified under paragraph (1) (Table 1) would have been classified in another category if the design value in

the area were 5 percent greater or 5 percent less than the level on which such classification was based, the Administrator may, in the Administrator's discretion, within 90 days after the initial classification, by the procedure required under paragraph (3), adjust the classification to place the area in such other category. In making such adjustment, the Administrator may consider the number of exceedances of the national primary ambient air quality standard for ozone in the area, the level of pollution transport between the area and other affected areas, including both intrastate and interstate transport, and the mix of sources and air pollutants in the area.

(5) Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the "Extension Year") the date specified in table 1 of paragraph (1) of this subsection if–

(A) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

(B) no more than 1 exceedance of the national ambient air quality standard level for ozone has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this paragraph for a single nonattainment area.

(b) New designations and reclassifications

(1) New designations to nonattainment

Any area that is designated attainment or unclassifiable for ozone under section 107(d)(4) [42 USCS § 7407(d)(4)], and that is subsequently redesignated to nonattainment for ozone under section 107(d)(3) [42 USCS § 7407(d)(3)], shall, at the

time of the redesignation, be classified by operation of law in accordance with table 1 under subsection (a). Upon its classification, the area shall be subject to the same requirements under section 110, subpart 1 of this part, and this subpart [42 USCS §§ 7410, 7501 et seq., 7511 et seq.] that would have applied had the area been so classified at the time of the notice under subsection (a)(3), except that any absolute, fixed date applicable in connection with any such requirement is extended by operation of law by a period equal to the length of time between the date of the enactment of the Clean Air Act Amendments of 1990 and the date the area is classified under this paragraph.

(2) Reclassification upon failure to attain

(A) Within 6 months following the applicable attainment date (including any extension thereof) for an ozone nonattainment area, the Administrator shall determine, based on the area's design value (as of the attainment date), whether the area attained the standard by that date. Except for any Severe or Extreme area, any area that the Administrator finds has not attained the standard by that date shall be reclassified by operation of law in accordance with table 1 of subsection (a) to the higher of –

(i) the next higher classification for the area, or

(ii) the classification applicable to the area's design value as determined at the time of the notice required under subparagraph (B).

No area shall be reclassified as Extreme under clause (ii).

(B) The Administrator shall publish a notice in the Federal Register, nolater than 6 months following the attainment date, identifying each area that the Administrator has determined

under subparagraph (A) as having failed to attain and identifying the reclassification, if any, described under subparagraph (A).

REGULATORY PROVISIONS

40 C.F.R. § 50.6 National primary and secondary ambient air quality standards for PM[10].

(a) The level of the national primary and secondary 24-hour ambient air quality standards for particulate matter is 150 micrograms per cubic meter ($\mu g/m^3$), 24-hour average concentration. The standards are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$, as determined in accordance with appendix K to this part, is equal to or less than one.

(b) The level of the national primary and secondary annual standards for particulate matter is 50 micrograms per cubic meter ($\mu g/m^3$), annual arithmetic mean. The standards are attained when the expected annual arithmetic mean concentration, as determined in accordance with appendix K to this part, is less than or equal to 50 $\mu g/m^3$.

c) For the purpose of determining attainment of the primary and secondary standards, particulate matter shall be measured in the ambient air as PM10 (particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers) by:

(1) A reference method based on appendix J and designated in accordance with part 53 of this chapter, or

(2) An equivalent method designated in accordance with part 53 of this chapter.

(d) The PM[10] standards set forth in this section will no longer apply to an area not attaining these standards as of

September 16, 1997, once EPA takes final action to promulgate a rule pursuant to section 172(e) of the Clean Air Act, as amended (42 U.S.C. 7472(e)) applicable to the area. The PM[10] standards set forth in this section will no longer apply to an area attaining these standards as of September 16, 1997, once EPA approves a State Implementation Plan (SIP) applicable to the area containing all PM[10] control measures adopted and implemented by the state prior to September 16, 1997, and a section 110 SIP implementing the PM standards published on July 18, 1997. SIP approvals are codified in 40 CFR part 52.

40 C.F.R. § 50.7 National primary and secondary ambient air quality standards for particulate matter.

(a) The national primary and secondary ambient air quality standards for particulate matter are:

(1) 15.0 micrograms per cubic meter ($\mu g/m^3$) annual arithmetic mean concentration, and 65 $\mu g/m^3$ 24-hour average concentration measured in the ambient air as PM[2.5] (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) by either:

(i) A reference method based on Appendix L of this part and designated in accordance with part 53 of this chapter; or

(ii) An equivalent method designated in accordance with part 53 of this chapter.

(2) 50 micrograms per cubic meter ($\mu g/m^3$) annual arithmetic mean concentration, and 150 $\mu g/m^3$ 24-hour average concentration measured in the ambient air as PM[10] (particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers) by either:

(i) A reference method based on Appendix M of this part and designated in accordance with part 53 of this chapter; or

(ii) An equivalent method designated in accordance with part 53 of this chapter.

(b) The annual primary and secondary PM[2.5] standards are met when the annual arithmetic mean concentration, as determined in accordance with Appendix N of this part, is less than or equal to 15.0 micrograms per cubic meter.

(c) The 24-hour primary and secondary PM[2.5] standards are met when the 98th percentile 24-hour concentration, as determined in accordance with Appendix N of this part, is less than or equal to 65 micrograms per cubic meter.

(d) The annual primary and secondary PM[10] standards are met when the annual arithmetic mean concentration, as determined in accordance with Appendix N of this part, is less than or equal to 50 micrograms per cubic meter.

(e) The 24-hour primary and secondary PM[10] standards are met when the 99th percentile 24-hour concentration, as determined in accordance with Appendix N of this part, is less than or equal to 150 micrograms per cubic meter.

40 C.F.R. § 50.9 National 1-hour primary and secondary ambient air quality standards for ozone.

(a) The level of the national 1-hour primary and secondary ambient air quality standards for ozone measured by a reference method based on Appendix D to this part and designated in accordance with part 53 of this chapter, is 0.12 parts per million (235 $\mu g/m^3$). The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 parts per million ($\mu g/m^3$) is

equal to or less than 1, as determined by Appendix H to this part.

(b) The 1-hour standards set forth in this section will no longer apply to an area once EPA determines that the area has air quality meeting the 1-hour standard. Area designations are codified in 40 CFR part 81.

40 C.F.R. § 50.10 National 8-hour primary and secondary ambient air quality standards for ozone.

(a) The level of the national 8-hour primary and secondary ambient air quality standards for ozone, measured by a reference method based on Appendix D to this part and designated in accordance with part 53 of this chapter, is 0.08 parts per million (ppm), daily maximum 8-hour average.

(b) The 8-hour primary and secondary ozone ambient air quality standards are met at an ambient air quality monitoring site when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm, as determined in accordance with Appendix I to this part.